

\*\*\* Run,Event: 199853,2057      Rs:      2 :    >>> TStnAna: Processed      196500 events

PDG Particle Data Group Code

SC Status Code

FM First Mother

SM Second Mother

FD First Daughter

SD Second Daughter

-----		interaction 0					-----				
i	name	PDG	SC	FM	SM	FD	SD	px	py	pz	e
0	proton	2212	3	-1	-1	-1	-1	980.000	980		
1	antiproton	-2212	3	-1	-1	-1	-1	-980	980		
2	d_bar	-1	3	0	-1	-1	-1	-0.358	0.793	76.489	76.494
3	u	2	3	1	-1	-1	-1	-1.527	-1.416	-240.542	240.551
4	d_bar	-1	3	2	-1	-1	-1	-1.625	-28.659	20.690	35.384
5	u	2	3	3	-1	-1	-1	0.557	0.496	-63.869	63.874
6	w+	24	3	4	5	-1	-1	-1.069	-28.162	-43.179	99.258
7	e+	-11	3	6	-1	-1	-1	-19.384	-23.245	17.995	35.212
8	nu_e	12	3	6	-1	-1	-1	18.315	-4.918	-61.174	64.046
<b>9</b>	<b>w+</b>	<b>24</b>	<b>2</b>	<b>6</b>	<b>-1</b>	<b>10</b>	<b>11</b>	<b>-1.069</b>	<b>-28.162</b>	<b>-43.179</b>	<b>99.258</b>
<b>10</b>	<b>e+</b>	<b>-11</b>	<b>1</b>	<b>7</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-19.384</b>	<b>-23.245</b>	<b>17.995</b>	<b>35.212</b>
<b>11</b>	<b>nu_e</b>	<b>12</b>	<b>1</b>	<b>8</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>18.315</b>	<b>-4.918</b>	<b>-61.174</b>	<b>64.046</b>
12	neutron	2112	1	0	-1	-1	-1	0.606	-0.468	504.384	504.386
13	antiproton	-2212	1	1	-1	-1	-1	1.018	1.149	-336.673	336.677
<b>14</b>	<b>s</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>-1</b>	<b>27</b>	<b>27</b>	<b>-4.193</b>	<b>12.624</b>	<b>3.637</b>	<b>13.799</b>
15	g	21	2	2	-1	27	27	-0.771	7.726	-1.136	7.846
16	g	21	2	2	-1	27	27	-0.573	-0.481	-0.695	1.021
17	g	21	2	2	-1	27	27	0.007	-2.476	-0.456	2.517
18	g	21	2	2	-1	27	27	1.225	-2.566	-1.734	3.330
19	g	21	2	3	-1	27	27	-1.409	-0.739	-71.151	71.169
20	g	21	2	3	-1	27	27	-1.282	-1.755	-36.030	36.095
21	u_bar	-2	2	1	-1	27	27	0.509	0.267	-402.775	402.776
22	s_bar	-3	2	2	-1	51	51	-4.382	41.208	11.644	43.048
23	g	21	2	2	-1	51	51	3.122	-0.440	-2.798	4.215
24	g	21	2	2	-1	51	51	5.883	-22.578	-18.499	29.775
25	g	21	2	2	-1	51	51	1.557	-2.983	-3.658	4.970
26	u	2	2	0	-1	51	51	-0.247	-0.325	399.116	399.116
<b>27</b>	<b>string</b>	<b>92</b>	<b>2</b>	<b>14</b>	<b>21</b>	<b>28</b>	<b>50</b>	<b>-6.488</b>	<b>12.599</b>	<b>-510.338</b>	<b>538.554</b>

28	$K_0^-$	-311	2	27	-1	82	82	-0.984	2.832	0.595	3.097
29	$\rho^-$	-213	2	27	-1	83	84	-0.619	2.475	0.329	2.620
30	$\rho^+$	213	2	27	-1	85	86	-1.676	6.244	1.907	6.770
31	$\rho^-$	-213	2	27	-1	87	88	-1.496	4.745	-0.210	5.032
32	$\pi^0$	111	2	27	-1	89	90	-0.127	0.184	0.271	0.377
33	$\rho^0$	113	2	27	-1	91	92	0.268	0.688	-0.505	1.123
34	$\rho^+$	213	2	27	-1	93	94	-0.197	0.457	0.048	0.828
35	$\pi^0$	111	2	27	-1	95	96	-0.017	0.646	0.056	0.662
36	$K^0$	311	2	27	-1	97	97	-0.448	0.534	-0.324	0.916
37	$K^{*-}$	-323	2	27	-1	98	99	0.035	0.067	0.024	0.879
38	$\rho^0$	113	2	27	-1	100	101	0.272	-0.299	-0.214	0.786
39	$\pi^0$	111	2	27	-1	102	103	0.006	0.337	0.136	0.388
40	$\omega$	223	2	27	-1	104	106	0.162	-1.885	-0.948	2.252
41	$\rho^+$	213	2	27	-1	107	108	-0.052	-1.138	-2.011	2.471
42	$\pi^-$	-211	1	27	-1	-1	-1	0.190	-0.888	-0.877	1.270
43	$\pi^0$	111	2	27	-1	109	110	-0.132	0.096	-2.181	2.191
44	$\pi^0$	111	2	27	-1	111	112	0.325	0.462	-0.565	0.810
45	$K^+$	321	1	27	-1	-1	-1	-0.396	-0.385	-16.915	16.931
46	$K^-$	-321	1	27	-1	-1	-1	-0.800	-1.200	-7.364	7.521
47	$K^{*+}$	323	2	27	-1	113	114	0.073	-0.837	-83.838	83.846
48	$\phi$	333	2	27	-1	115	116	-1.261	-0.738	-71.347	71.369
49	$\phi$	333	2	27	-1	117	118	0.230	0.425	-94.818	94.825
50	$K^{*-}$	-323	2	27	-1	119	120	0.158	-0.223	-231.588	231.590
<b>51</b>	<b>string</b>	<b>92</b>	<b>2</b>	<b>22</b>	<b>26</b>	<b>52</b>	<b>81</b>	<b>5.933</b>	<b>14.882</b>	<b>385.806</b>	<b>481.125</b>
52	$K^+$	321	1	51	-1	-1	-1	-0.593	9.310	2.594	9.695
53	$\rho^-$	-213	2	51	-1	121	122	-2.080	15.663	4.619	16.486
54	$\omega$	223	2	51	-1	123	124	-0.701	4.655	1.236	4.930
55	$\Delta^+$	-1114	2	51	-1	125	126	-0.278	7.521	1.644	7.802
56	$\rho^-$	-213	2	51	-1	127	128	0.257	1.447	0.460	1.760
57	proton	2212	1	51	-1	-1	-1	-0.467	1.757	0.516	2.110
58	$\pi^-$	-211	1	51	-1	-1	-1	0.056	0.150	-0.521	0.562
59	antineutron	-2112	1	51	-1	-1	-1	0.677	-0.016	-0.236	1.182

60 proton	2212	1	51	-1	-1	-1	0.138	-0.238	-0.244	1.008
61 eta'	331	2	51	-1	129	131	1.722	-1.379	-2.013	3.137
<b>62 pi-</b>	<b>-211</b>	<b>1</b>	<b>51</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.260</b>	<b>-0.213</b>	<b>-0.026</b>	<b>0.365</b>
<b>63 pi+</b>	<b>211</b>	<b>1</b>	<b>51</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>1.064</b>	<b>-2.956</b>	<b>-2.907</b>	<b>4.283</b>
64 rho-	-213	2	51	-1	132	133	1.233	-2.493	-2.435	3.836
<b>65 pi+</b>	<b>211</b>	<b>1</b>	<b>51</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.533</b>	<b>-1.432</b>	<b>-0.520</b>	<b>1.620</b>
<b>66 K-</b>	<b>-321</b>	<b>1</b>	<b>51</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>2.303</b>	<b>-7.787</b>	<b>-7.429</b>	<b>11.017</b>
67 K*0	313	2	51	-1	134	135	1.725	-6.906	-5.446	8.997
<b>68 pi+</b>	<b>211</b>	<b>1</b>	<b>51</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.058</b>	<b>0.005</b>	<b>-0.191</b>	<b>0.243</b>
69 rho-	-213	2	51	-1	136	137	0.495	-1.454	-1.549	2.313
<b>70 pi+</b>	<b>211</b>	<b>1</b>	<b>51</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.145</b>	<b>-0.191</b>	<b>0.342</b>	<b>0.441</b>
71 eta	221	2	51	-1	138	140	0.360	0.397	0.258	0.808
72 pi0	111	2	51	-1	141	142	-0.234	-0.116	1.124	1.162
73 rho-	-213	2	51	-1	143	144	0.605	-0.015	1.496	1.752
74 rho+	213	2	51	-1	145	146	-0.405	-0.712	3.547	3.707
75 rho0	113	2	51	-1	147	148	0.162	0.360	4.750	4.834
76 pi0	111	2	51	-1	149	150	-0.351	-0.689	1.832	1.993
77 omega	223	2	51	-1	151	153	0.317	0.344	2.477	2.634
78 K*-	-323	2	51	-1	154	155	-0.454	0.180	147.421	147.424
79 K*0	313	2	51	-1	156	157	-0.028	-0.360	32.998	33.012
80 pi0	111	2	51	-1	158	159	-0.160	-0.107	18.725	18.727
81 rho+	213	2	51	-1	160	161	0.208	0.157	183.283	183.285
<b>82 K_s0</b>	<b>310</b>	<b>1</b>	<b>28</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.984</b>	<b>2.832</b>	<b>0.595</b>	<b>3.097</b>
<b>83 pi-</b>	<b>-211</b>	<b>1</b>	<b>29</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.016</b>	<b>0.386</b>	<b>0.028</b>	<b>0.412</b>
84 pi0	111	2	29	-1	162	163	-0.636	2.089	0.301	2.209
85 pi+	211	1	30	-1	-1	-1	-1.008	2.731	0.750	3.009
86 pi0	111	2	30	-1	164	165	-0.668	3.513	1.158	3.761
87 pi-	-211	1	31	-1	-1	-1	-1.010	2.131	-0.187	2.369
88 pi0	111	2	31	-1	166	167	-0.486	2.615	-0.023	2.663
89 gamma	22	1	32	-1	-1	-1	-0.121	0.199	0.275	0.360
90 gamma	22	1	32	-1	-1	-1	-0.006	-0.015	-0.003	0.017
91 pi-	-211	1	33	-1	-1	-1	0.434	0.454	-0.182	0.669

92 pi+	211	1	33	-1	-1	-1	-0.166	0.233	-0.324	0.454
93 pi+	211	1	34	-1	-1	-1	0.065	0.501	0.068	0.529
94 pi0	111	2	34	-1	168	169	-0.262	-0.044	-0.020	0.299
95 gamma	22	1	35	-1	-1	-1	0.010	0.251	0.086	0.265
96 gamma	22	1	35	-1	-1	-1	-0.027	0.395	-0.030	0.397
97 K_L0	130	1	36	-1	-1	-1	-0.448	0.534	-0.324	0.916
98 K-	-321	1	37	-1	-1	-1	0.080	-0.224	-0.037	0.549
99 pi0	111	2	37	-1	170	171	-0.045	0.291	0.061	0.330
100 pi-	-211	1	38	-1	-1	-1	-0.068	-0.301	0.038	0.340
101 pi+	211	1	38	-1	-1	-1	0.340	0.002	-0.252	0.446
102 gamma	22	1	39	-1	-1	-1	-0.053	0.062	0.032	0.088
103 gamma	22	1	39	-1	-1	-1	0.059	0.276	0.104	0.301
104 pi-	-211	1	40	-1	-1	-1	0.088	-0.090	-0.188	0.265
105 pi+	211	1	40	-1	-1	-1	-0.078	-0.904	-0.437	1.016
106 pi0	111	2	40	-1	172	173	0.152	-0.891	-0.324	0.970
107 pi+	211	1	41	-1	-1	-1	0.182	-0.965	-1.879	2.125
108 pi0	111	2	41	-1	174	175	-0.234	-0.173	-0.132	0.346
109 gamma	22	1	43	-1	-1	-1	-0.123	0.128	-1.758	1.767
110 gamma	22	1	43	-1	-1	-1	-0.009	-0.032	-0.422	0.424
111 gamma	22	1	44	-1	-1	-1	-0.008	0.034	-0.060	0.070
112 gamma	22	1	44	-1	-1	-1	0.332	0.428	-0.504	0.741
113 K0	311	2	47	-1	176	176	0.185	-0.778	-55.977	55.985
114 pi+	211	1	47	-1	-1	-1	-0.112	-0.059	-27.861	27.862
115 K-	-321	1	48	-1	-1	-1	-0.652	-0.444	-34.212	34.225
116 K+	321	1	48	-1	-1	-1	-0.609	-0.294	-37.135	37.144
117 K+	321	1	49	-1	-1	-1	0.022	0.290	-50.019	50.022
118 K-	-321	1	49	-1	-1	-1	0.208	0.135	-44.800	44.803
119 K-	-321	1	50	-1	-1	-1	0.098	-0.396	-196.988	196.989
120 pi0	111	2	50	-1	177	178	0.059	0.173	-34.600	34.600
121 pi-	-211	1	53	-1	-1	-1	-0.454	1.766	0.407	1.874
122 pi0	111	2	53	-1	179	180	-1.626	13.896	4.211	14.612
123 pi-	-211	1	54	-1	-1	-1	-0.720	3.046	0.578	3.186

124 pi+	211	1	54	-1	-1	-1	0.019	1.609	0.658	1.744
125 antineutron	-2112	1	55	-1	-1	-1	-0.410	6.074	1.191	6.274
126 pi+	211	1	55	-1	-1	-1	0.133	1.447	0.453	1.528
127 pi-	-211	1	56	-1	-1	-1	0.493	0.508	0.185	0.745
128 pi0	111	2	56	-1	181	182	-0.236	0.939	0.274	1.015
129 pi+	211	1	61	-1	-1	-1	0.706	-0.574	-0.871	1.267
130 pi-	-211	1	61	-1	-1	-1	0.138	-0.180	-0.265	0.375
131 eta	221	2	61	-1	183	185	0.878	-0.625	-0.878	1.494
132 pi-	-211	1	64	-1	-1	-1	-0.034	-0.691	-0.305	0.769
133 pi0	111	2	64	-1	186	187	1.268	-1.801	-2.130	3.067
134 K+	321	1	67	-1	-1	-1	1.041	-3.662	-2.771	4.735
135 pi-	-211	1	67	-1	-1	-1	0.684	-3.243	-2.675	4.262
136 pi-	-211	1	69	-1	-1	-1	0.041	-0.815	-0.409	0.923
137 pi0	111	2	69	-1	188	189	0.454	-0.639	-1.139	1.389
138 pi0	111	2	71	-1	190	191	0.259	0.057	0.126	0.323
139 pi0	111	2	71	-1	192	193	0.072	0.105	0.100	0.211
140 pi0	111	2	71	-1	194	195	0.029	0.235	0.032	0.274
141 gamma	22	1	72	-1	-1	-1	-0.119	0.013	0.517	0.531
142 gamma	22	1	72	-1	-1	-1	-0.115	-0.129	0.607	0.631
143 pi-	-211	1	73	-1	-1	-1	0.172	-0.299	0.689	0.783
144 pi0	111	2	73	-1	196	197	0.434	0.284	0.808	0.969
145 pi+	211	1	74	-1	-1	-1	-0.096	-0.506	2.902	2.951
146 pi0	111	2	74	-1	198	199	-0.309	-0.206	0.645	0.756
147 pi+	211	1	75	-1	-1	-1	-0.014	-0.226	1.632	1.654
148 pi-	-211	1	75	-1	-1	-1	0.176	0.585	3.118	3.181
149 gamma	22	1	76	-1	-1	-1	-0.124	-0.337	0.979	1.042
150 gamma	22	1	76	-1	-1	-1	-0.227	-0.351	0.853	0.950
151 pi+	211	1	77	-1	-1	-1	0.306	0.096	0.661	0.748
152 pi-	-211	1	77	-1	-1	-1	-0.034	0.066	1.408	1.417
153 pi0	111	2	77	-1	200	201	0.046	0.183	0.408	0.469
154 K-	-321	1	78	-1	-1	-1	-0.233	0.300	88.551	88.553
155 pi0	111	2	78	-1	202	203	-0.221	-0.120	58.871	58.872

156	K0	311	2	79	-1	204	204	0.231	-0.094	19.239	19.247
157	pi0	111	2	79	-1	205	206	-0.259	-0.266	13.759	13.765
158	gamma	22	1	80	-1	-1	-1	-0.144	-0.052	8.928	8.930
159	gamma	22	1	80	-1	-1	-1	-0.016	-0.055	9.797	9.797
160	pi+	211	1	81	-1	-1	-1	-0.125	0.046	8.883	8.885
161	pi0	111	2	81	-1	207	209	0.333	0.111	174.400	174.400
162	gamma	22	1	84	-1	-1	-1	-0.167	0.767	0.097	0.791
163	gamma	22	1	84	-1	-1	-1	-0.469	1.322	0.204	1.418
164	gamma	22	1	86	-1	-1	-1	-0.390	1.693	0.573	1.830
165	gamma	22	1	86	-1	-1	-1	-0.278	1.819	0.585	1.931
166	gamma	22	1	88	-1	-1	-1	-0.139	0.487	0.018	0.507
167	gamma	22	1	88	-1	-1	-1	-0.347	2.128	-0.041	2.156
168	gamma	22	1	94	-1	-1	-1	-0.217	-0.050	-0.068	0.233
169	gamma	22	1	94	-1	-1	-1	-0.045	0.006	0.048	0.066
170	gamma	22	1	99	-1	-1	-1	-0.034	0.305	0.062	0.313
171	gamma	22	1	99	-1	-1	-1	-0.011	-0.013	-0.001	0.017
172	gamma	22	1	106	-1	-1	-1	0.169	-0.665	-0.223	0.722
173	gamma	22	1	106	-1	-1	-1	-0.017	-0.226	-0.101	0.248
174	gamma	22	1	108	-1	-1	-1	-0.119	-0.008	-0.052	0.130
175	gamma	22	1	108	-1	-1	-1	-0.114	-0.165	-0.080	0.216
176	K_S0	310	1	113	-1	-1	-1	0.185	-0.778	-55.977	55.985
177	gamma	22	1	120	-1	-1	-1	0.054	0.046	-5.423	5.424
178	gamma	22	1	120	-1	-1	-1	0.005	0.127	-29.177	29.177
179	gamma	22	1	122	-1	-1	-1	-0.508	4.646	1.351	4.865
180	gamma	22	1	122	-1	-1	-1	-1.118	9.250	2.860	9.747
181	gamma	22	1	128	-1	-1	-1	-0.091	0.366	0.039	0.380
182	gamma	22	1	128	-1	-1	-1	-0.145	0.573	0.235	0.636
183	pi0	111	2	131	-1	210	211	0.481	-0.419	-0.448	0.792
184	pi0	111	2	131	-1	212	213	0.300	-0.137	-0.369	0.513
185	pi0	111	2	131	-1	214	215	0.097	-0.069	-0.061	0.190
186	gamma	22	1	133	-1	-1	-1	0.811	-1.165	-1.282	1.913

187 gamma	22	1	133	-1	-1	-1	0.456	-0.636	-0.848	1.154
188 gamma	22	1	137	-1	-1	-1	0.230	-0.279	-0.417	0.552
189 gamma	22	1	137	-1	-1	-1	0.224	-0.359	-0.722	0.837
190 gamma	22	1	138	-1	-1	-1	0.160	-0.026	0.036	0.166
191 gamma	22	1	138	-1	-1	-1	0.100	0.083	0.090	0.158
192 gamma	22	1	139	-1	-1	-1	0.060	0.130	0.111	0.181
193 gamma	22	1	139	-1	-1	-1	0.013	-0.025	-0.011	0.030
194 gamma	22	1	140	-1	-1	-1	0.014	-0.007	0.028	0.032
195 gamma	22	1	140	-1	-1	-1	0.014	0.241	0.004	0.242
196 gamma	22	1	144	-1	-1	-1	0.009	-0.001	-0.004	0.010
197 gamma	22	1	144	-1	-1	-1	0.424	0.285	0.811	0.959
198 gamma	22	1	146	-1	-1	-1	-0.126	-0.032	0.316	0.342
199 gamma	22	1	146	-1	-1	-1	-0.183	-0.174	0.328	0.414
200 gamma	22	1	153	-1	-1	-1	0.072	0.096	0.131	0.178
201 gamma	22	1	153	-1	-1	-1	-0.026	0.087	0.277	0.292
202 gamma	22	1	155	-1	-1	-1	-0.092	0.013	26.261	26.261
203 gamma	22	1	155	-1	-1	-1	-0.128	-0.134	32.610	32.610
204 K_L0	130	1	156	-1	-1	-1	0.231	-0.094	19.239	19.247
205 gamma	22	1	157	-1	-1	-1	-0.075	-0.160	7.422	7.424
206 gamma	22	1	157	-1	-1	-1	-0.185	-0.106	6.338	6.341
207 gamma	22	1	161	-1	-1	-1	0.093	-0.010	27.322	27.322
208 e+	-11	1	161	-1	-1	-1	0.097	0.049	62.258	62.258
209 e-	11	1	161	-1	-1	-1	0.143	0.071	84.820	84.821
210 gamma	22	1	183	-1	-1	-1	0.170	-0.120	-0.221	0.303
211 gamma	22	1	183	-1	-1	-1	0.312	-0.300	-0.227	0.489
212 gamma	22	1	184	-1	-1	-1	0.055	0.024	-0.038	0.071
213 gamma	22	1	184	-1	-1	-1	0.246	-0.161	-0.331	0.442
214 gamma	22	1	185	-1	-1	-1	-0.025	0.011	0.008	0.029
215 gamma	22	1	185	-1	-1	-1	0.122	-0.080	-0.069	0.161

Run,Event: 231334,3851 Rs: 2 : >>> TStnAna: Processed 385500 events

interaction 0											
i	name	PDG	SC	FM	SM	FD	SD	px	py	pz	e
0	proton	2212	3	-1	-1	-1	-1	980	980		
1	antiproton	-2212	3	-1	-1	-1	-1	-980	980		
2	g	21	3	0	-1	-1	-1	2.352	0.487	152.726	152.744
3	g	21	3	1	-1	-1	-1	-1.361	-1.410	-38.744	38.793
4	c	4	3	2	-1	-1	-1	2.162	9.583	65.900	66.628
5	b_bar	-5	3	3	-1	-1	-1	4.815	-10.566	-21.938	24.821
6	w+	24	3	4	5	-1	-1	6.977	-0.983	43.963	91.449
7	e+	-11	3	6	-1	-1	-1	-32.518	14.457	9.574	36.852
8	nu_e	12	3	6	-1	-1	-1	39.495	-15.440	34.389	54.597
<b>9</b>	<b>w+</b>	<b>24</b>	<b>2</b>	<b>6</b>	<b>-1</b>	<b>10</b>	<b>11</b>	<b>6.977</b>	<b>-0.983</b>	<b>43.963</b>	<b>91.449</b>
<b>10</b>	<b>e+</b>	<b>-11</b>	<b>1</b>	<b>7</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-32.518</b>	<b>14.457</b>	<b>9.574</b>	<b>36.852</b>
<b>11</b>	<b>nu_e</b>	<b>12</b>	<b>1</b>	<b>8</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>39.495</b>	<b>-15.440</b>	<b>34.389</b>	<b>54.597</b>
12	b	5	2	3	-1	25	25	-8.237	15.086	2.039	17.962
13	u_bar	-2	2	1	-1	25	25	0.497	0.627	-19.712	19.731
14	c_bar	-4	2	2	-1	34	34	5.776	-10.107	16.582	20.316
15	g	21	2	2	-1	34	34	0.481	-0.750	2.309	2.475
16	g	21	2	2	-1	34	34	0.251	0.464	0.014	0.528
17	g	21	2	2	-1	34	34	-1.384	-2.386	18.475	18.679
18	d	1	2	0	-1	34	34	-0.936	-0.345	80.349	80.356
19	uu_1	2203	2	0	-1	43	43	-1.416	-0.142	746.877	746.878
20	g	21	2	2	-1	43	43	1.927	-0.566	13.490	13.639
21	g	21	2	2	-1	43	43	-6.722	0.018	15.148	16.573
22	g	21	2	2	-1	43	43	0.194	0.856	5.300	5.373
23	g	21	2	3	-1	43	43	1.728	-2.554	-3.338	4.544
24	ud_0_bar	-2101	2	1	-1	43	43	0.864	0.782	-921.496	921.497
25	string	92	2	12	13	26	33	-7.740	15.713	-17.673	37.693
26	B*0_bar	-513	2	25	-1	163	164	-7.376	13.820	1.440	16.609
27	pi0	111	2	25	-1	69	70	-0.161	-0.003	0.133	0.249
28	rho0	113	2	25	-1	71	72	-0.069	0.505	-0.411	0.952
<b>29</b>	<b>pi-</b>	<b>-211</b>	<b>1</b>	<b>25</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.154</b>	<b>-0.008</b>	<b>-2.254</b>	<b>2.263</b>



30 rho0	113	2	25	-1	73	74	-0.160	0.534	-1.283	1.576
<b>31 proton</b>	<b>2212</b>	<b>1</b>	<b>25</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.113</b>	<b>-0.155</b>	<b>-1.789</b>	<b>2.029</b>
<b>32 antiproton</b>	<b>-2212</b>	<b>1</b>	<b>25</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.659</b>	<b>1.649</b>	<b>-4.490</b>	<b>4.919</b>
33 omega	223	2	25	-1	75	76	-0.592	-0.630	-9.020	9.096
<b>34 string</b>	<b>92</b>	<b>2</b>	<b>14</b>	<b>18</b>	<b>35</b>	<b>42</b>	<b>4.188</b>	<b>-13.124</b>	<b>117.730</b>	<b>122.354</b>
35 D0_bar	-421	2	34	-1	185	186	5.359	-9.520	15.698	19.216
36 omega	223	2	34	-1	77	79	0.890	-0.359	2.397	2.698
37 rho-	-213	2	34	-1	80	81	-0.636	-0.443	2.859	3.091
38 rho+	213	2	34	-1	82	83	0.604	-1.003	4.677	4.909
39 rho-	-213	2	34	-1	84	85	-0.316	-0.404	2.567	2.752
40 K0_bar	-311	2	34	-1	86	86	-0.479	-0.875	4.765	4.894
41 K*+	323	2	34	-1	87	88	-0.742	-0.012	27.266	27.290
<b>42 pi-</b>	<b>-211</b>	<b>1</b>	<b>34</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.492</b>	<b>-0.509</b>	<b>57.500</b>	<b>57.504</b>
<b>43 string</b>	<b>92</b>	<b>2</b>	<b>19</b>	<b>24</b>	<b>44</b>	<b>68</b>	<b>-3.425</b>	<b>-1.606</b>	<b>-144.019</b>	<b>1708.503</b>
44 rho+	213	2	43	-1	89	90	-0.386	0.296	152.813	152.816
45 Delta+	2214	2	43	-1	91	92	-0.773	-0.769	379.788	379.792
46 Delta--	-2224	2	43	-1	93	94	-0.313	0.293	143.728	143.735
47 pi+	211	1	43	-1	-1	-1	0.399	0.123	17.642	17.647
48 neutron	2112	1	43	-1	-1	-1	-0.244	-0.595	39.220	39.236
49 K0_bar	-311	2	43	-1	95	95	0.749	0.441	8.423	8.482
50 K*+	323	2	43	-1	96	97	-0.070	-0.112	12.323	12.351
51 pi-	-211	1	43	-1	-1	-1	0.414	-0.537	7.109	7.142
52 rho0	113	2	43	-1	98	99	-2.506	-0.180	5.086	5.724
53 K0_bar	-311	2	43	-1	100	100	0.112	0.616	6.090	6.142
54 K*+	323	2	43	-1	101	102	-3.418	0.134	6.842	7.725
<b>55 pi-</b>	<b>-211</b>	<b>1</b>	<b>43</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.213</b>	<b>0.061</b>	<b>0.138</b>	<b>0.297</b>
56 eta	221	2	43	-1	103	104	-0.056	-0.084	0.065	0.560
57 rho+	213	2	43	-1	105	106	0.246	-0.050	0.805	1.119
<b>58 pi-</b>	<b>-211</b>	<b>1</b>	<b>43</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.024</b>	<b>-0.251</b>	<b>0.145</b>	<b>0.322</b>
59 rho0	113	2	43	-1	107	108	0.286	-0.610	-0.936	1.352
60 omega	223	2	43	-1	109	111	0.190	0.060	-1.150	1.406
61 Delta0_bar	-2114	2	43	-1	112	113	1.149	-0.847	-3.792	4.229

62 pi0	111	2	43	-1	114	115	-0.992	-0.274	-13.545	13.585
63 proton	2212	1	43	-1	-1	-1	0.648	-0.160	-119.917	119.923
64 K*-	-323	2	43	-1	116	117	0.419	0.313	-110.433	110.437
65 K*0	313	2	43	-1	118	119	0.435	0.114	-68.576	68.584
66 rho+	213	2	43	-1	120	121	-0.727	0.274	-92.971	92.977
67 antiproton	-2212	1	43	-1	-1	-1	0.806	0.370	-379.098	379.100
68 eta	221	2	43	-1	122	124	0.018	-0.231	-133.818	133.819
<b>69 gamma</b>	<b>22</b>	<b>1</b>	<b>27</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.071</b>	<b>-0.064</b>	<b>0.035</b>	<b>0.102</b>
<b>70 gamma</b>	<b>22</b>	<b>1</b>	<b>27</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.090</b>	<b>0.062</b>	<b>0.099</b>	<b>0.147</b>
<b>71 pi-</b>	<b>-211</b>	<b>1</b>	<b>28</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.053</b>	<b>-0.078</b>	<b>0.070</b>	<b>0.183</b>
<b>72 pi+</b>	<b>211</b>	<b>1</b>	<b>28</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.016</b>	<b>0.583</b>	<b>-0.481</b>	<b>0.769</b>
<b>73 pi+</b>	<b>211</b>	<b>1</b>	<b>30</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.250</b>	<b>0.162</b>	<b>-1.064</b>	<b>1.114</b>
<b>74 pi-</b>	<b>-211</b>	<b>1</b>	<b>30</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.091</b>	<b>0.372</b>	<b>-0.218</b>	<b>0.462</b>
<b>75 gamma</b>	<b>22</b>	<b>1</b>	<b>33</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.310</b>	<b>0.094</b>	<b>-1.479</b>	<b>1.514</b>
76 pi0	111	2	33	-1	125	126	-0.282	-0.724	-7.542	7.583
77 pi+	211	1	36	-1	-1	-1	0.667	-0.461	1.533	1.740
78 pi-	-211	1	36	-1	-1	-1	0.155	0.137	0.623	0.671
79 pi0	111	2	36	-1	127	129	0.069	-0.036	0.242	0.287
80 pi-	-211	1	37	-1	-1	-1	0.011	-0.477	0.969	1.089
81 pi0	111	2	37	-1	130	131	-0.646	0.034	1.890	2.003
82 pi+	211	1	38	-1	-1	-1	0.786	-0.647	3.789	3.926
83 pi0	111	2	38	-1	132	133	-0.183	-0.355	0.888	0.983
84 pi-	-211	1	39	-1	-1	-1	-0.220	-0.523	0.905	1.077
85 pi0	111	2	39	-1	134	135	-0.096	0.119	1.662	1.675
86 K_L0	130	1	40	-1	-1	-1	-0.479	-0.875	4.765	4.894
87 K+	321	1	41	-1	-1	-1	-0.835	-0.012	23.526	23.546
88 pi0	111	2	41	-1	136	137	0.094	3.740	3.744	
89 pi+	211	1	44	-1	-1	-1	-0.456	0.021	52.375	52.377
90 pi0	111	2	44	-1	138	139	0.070	0.275	100.438	100.439
91 proton	2212	1	45	-1	-1	-1	-0.706	-0.498	348.980	348.982
92 pi0	111	2	45	-1	140	141	-0.067	-0.271	30.809	30.810
93 antiproton	-2212	1	46	-1	-1	-1	0.066	0.122	81.761	81.767







	interaction 1										
190 proton	2212	3	-1	-1	-1	-1		980	980		
191 antiproton	-2212	3	-1	-1	-1	-1		-980	980		
192 g	21	3	0	-1	-1	-1	-0.059	-0.544	-0.018	0.547	
193 g	21	3	1	-1	-1	-1	0.547	-0.152	-97.025	97.026	
194 g	21	3	2	-1	-1	-1	-0.052	-0.474	-0.016	0.477	
195 g	21	3	3	-1	-1	-1	1.810	-0.734	-70.294	70.321	
196 u	2	3	4	5	-1	-1	-2.289	-2.860	-23.918	24.199	
197 u_bar	-2	3	4	5	-1	-1	4.047	1.652	-46.392	46.598	
198 u_bar	-2	2	7	-1	17	17	3.957	1.615	-45.361	45.563	
199 g	21	2	3	-1	17	17	-0.710	0.487	-20.336	20.354	
200 uu_1_bar	-2203	2	1	-1	17	17	-0.017	0.250	-855.562	855.562	
201 u	2	2	6	-1	27	27	-1.653	-2.230	-15.389	15.640	
202 g	21	2	6	-1	27	27	-0.546	-0.593	-9.560	9.594	
203 ud_1	2103	2	0	-1	27	27	0.181	0.258	909.820	909.820	
204 u	2	2	0	-1	43	43	-0.122	0.286	69.910	69.911	
205 g	21	2	3	-1	43	43	-0.561	0.025	-6.397	6.422	
206 d_bar	-1	2	1	-1	43	43	-0.530	-0.099	-27.125	27.132	
207 string	92	2	8	10	18	26	3.230	2.353	-921.259	921.480	
<b>208 pi-</b>	<b>-211</b>	<b>1</b>	<b>17</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>1.587</b>	<b>0.547</b>	<b>-19.031</b>	<b>19.105</b>	
209 rho+	213	2	17	-1	57	58	0.586	0.732	-19.065	19.105	
210 omega	223	2	17	-1	59	61	0.153	-0.153	-20.131	20.147	
211 rho-	-213	2	17	-1	62	63	-0.190	0.094	-11.824	11.852	
212 rho0	113	2	17	-1	64	65	1.333	0.685	-27.287	27.340	
<b>213 pi+</b>	<b>211</b>	<b>1</b>	<b>17</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.384</b>	<b>0.189</b>	<b>-25.000</b>	<b>25.004</b>	
<b>214 pi-</b>	<b>-211</b>	<b>1</b>	<b>17</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.183</b>	<b>0.124</b>	<b>-14.124</b>	<b>14.126</b>	
215 rho0	113	2	17	-1	66	67	-0.451	0.126	-127.992	127.995	
216 antiproton	-2212	1	17	-1	-1	-1	0.011	0.010	-656.806	656.807	
217 string	92	2	11	13	28	42	-2.018	-2.565	884.872	935.055	
218 rho0	113	2	27	-1	68	69	-0.133	0.054	-4.028	4.048	
<b>219 pi+</b>	<b>211</b>	<b>1</b>	<b>27</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.553</b>	<b>-0.352</b>	<b>-2.109</b>	<b>2.213</b>	
<b>220 pi-</b>	<b>-211</b>	<b>1</b>	<b>27</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-1.021</b>	<b>-1.991</b>	<b>-13.878</b>	<b>14.058</b>	
221 pi0	111	2	27	-1	70	71	-0.091	-0.309	-0.350	0.494	
222 pi0	111	2	27	-1	72	73	-0.075	0.089	-0.641	0.665	

223 rho0	113	2	27	-1	74	75	-0.074	-0.286	-2.137	2.314
224 proton	2212	1	27	-1	-1	-1	-0.398	-0.109	-0.108	1.031
225 antineutron	-2112	1	27	-1	-1	-1	0.078	0.543	-0.146	1.097
226 pi0	111	2	27	-1	76	77	-0.019	-0.496	0.063	0.518
227 rho-	-213	2	27	-1	78	79	0.079	0.266	0.513	0.895
228 rho+	213	2	27	-1	80	81	0.015	-0.004	18.556	18.571
229 pi-	-211	1	27	-1	-1	-1	-0.093	-0.323	28.618	28.621
230 rho+	213	2	27	-1	82	83	-0.025	0.200	31.336	31.345
231 Delta-	1114	2	27	-1	84	85	0.199	-0.270	533.643	533.645
232 rho+	213	2	27	-1	86	87	0.092	0.423	295.538	295.540
233 string	92	2	14	16	44	56	-1.212	0.212	36.388	103.465
234 Delta++	2224	2	43	-1	88	89	-0.239	-0.040	25.594	25.627
235 Delta--	-2224	2	43	-1	90	91	-0.243	0.660	33.292	33.319
236 pi0	111	2	43	-1	92	93	-0.066	-0.766	0.871	1.170
237 Delta++	2224	2	43	-1	94	95	0.181	0.572	3.056	3.380
<b>238 pi-</b>	<b>-211</b>	<b>1</b>	<b>43</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.069</b>	<b>0.143</b>	<b>2.378</b>	<b>2.388</b>
<b>239 antiproton</b>	<b>-2212</b>	<b>1</b>	<b>43</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.104</b>	<b>-0.187</b>	<b>2.583</b>	<b>2.757</b>
240 rho+	213	2	43	-1	96	97	-0.125	0.340	0.288	0.936
241 Delta-	1114	2	43	-1	98	99	-0.483	0.176	1.315	
242 rho+	213	2	43	-1	100	101	-0.084	0.096	-1.214	1.434
243 sigma*0_bar	-3214	2	43	-1	102	103	0.121	-0.418	-4.178	4.422
244 eta'	331	2	43	-1	104	105	-0.604	0.216	-3.755	3.928
245 kappa*0_bar	-313	2	43	-1	106	107	-0.145	0.325	-16.940	16.967
246 rho0	113	2	43	-1	108	109	-0.181	-0.245	-5.765	5.823
<b>247 pi+</b>	<b>211</b>	<b>1</b>	<b>19</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.392</b>	<b>0.499</b>	<b>-6.024</b>	<b>6.059</b>
248 pi0	111	2	19	-1	110	111	0.195	0.232	-13.042	13.046
249 pi+	211	1	20	-1	-1	-1	0.009	-0.344	-7.545	7.554
250 pi-	-211	1	20	-1	-1	-1	0.130	0.048	-8.495	8.498
251 pi0	111	2	20	-1	112	113	0.015	0.143	-4.091	4.095
<b>252 pi-</b>	<b>-211</b>	<b>1</b>	<b>21</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.171</b>	<b>0.069</b>	<b>-8.823</b>	<b>8.826</b>
253 pi0	111	2	21	-1	114	115	-0.360	0.025	-3.002	3.026
254 pi+	211	1	22	-1	-1	-1	0.048	0.132	-7.899	7.902

255 pi-	-211	1	22	-1	-1	-1	1.284	0.553	-19.388	19.439
256 pi+	211	1	25	-1	-1	-1	-0.356	0.355	-100.893	100.895
257 pi-	-211	1	25	-1	-1	-1	-0.094	-0.230	-27.099	27.100
258 pi+	211	1	28	-1	-1	-1	0.058	0.067	-1.710	1.718
259 pi-	-211	1	28	-1	-1	-1	-0.191	-0.013	-2.317	2.329
260 gamma	22	1	31	-1	-1	-1	0.018	-0.066	-0.138	0.154
261 gamma	22	1	31	-1	-1	-1	-0.109	-0.243	-0.212	0.340
262 gamma	22	1	32	-1	-1	-1	-0.080	0.119	-0.577	0.594
263 gamma	22	1	32	-1	-1	-1	0.005	-0.030	-0.064	0.071
264 pi-	-211	1	33	-1	-1	-1	0.336	-0.054	-0.638	0.737
265 pi+	211	1	33	-1	-1	-1	-0.410	-0.233	-1.499	1.577
266 gamma	22	1	36	-1	-1	-1	0.052	-0.116	0.030	0.131
267 gamma	22	1	36	-1	-1	-1	-0.070	-0.380	0.033	0.387
268 pi-	-211	1	37	-1	-1	-1	0.253	-0.033	0.040	0.293
269 pi0	111	2	37	-1	116	117	-0.173	0.299	0.474	0.601
270 pi+	211	1	38	-1	-1	-1	0.021	0.232	3.008	3.020
271 pi0	111	2	38	-1	118	119	-0.006	-0.236	15.549	15.551
272 pi+	211	1	40	-1	-1	-1	-0.038	-0.251	14.681	14.684
273 pi0	111	2	40	-1	120	121	0.013	0.451	16.655	16.661
274 neutron	2112	1	41	-1	-1	-1	0.047	-0.167	297.513	297.514
275 pi-	-211	1	41	-1	-1	-1	0.152	-0.103	236.130	236.131
276 pi+	211	1	42	-1	-1	-1	-0.208	0.077	181.691	181.691
277 pi0	111	2	42	-1	122	123	0.300	0.347	113.848	113.849
278 proton	2212	1	44	-1	-1	-1	-0.145	0.144	23.361	23.380
279 pi+	211	1	44	-1	-1	-1	-0.094	-0.184	2.233	2.247
280 antiproton	-2212	1	45	-1	-1	-1	-0.176	0.690	29.769	29.792
281 pi-	-211	1	45	-1	-1	-1	-0.067	-0.029	3.523	3.527
282 gamma	22	1	46	-1	-1	-1	0.019	-0.517	0.572	0.772
283 gamma	22	1	46	-1	-1	-1	-0.085	-0.249	0.299	0.398
284 proton	2212	1	47	-1	-1	-1	-0.163	0.417	2.184	2.419
285 pi+	211	1	47	-1	-1	-1	0.344	0.154	0.873	0.961
286 pi+	211	1	50	-1	-1	-1	-0.025	0.576	0.134	0.608



287 pi0	111	2	50	-1	124	125	-0.100	-0.236	0.154	0.328
288 neutron	2112	1	51	-1	-1	-1	-0.161	-0.264	0.195	1.008
289 pi-	-211	1	51	-1	-1	-1	0.162	-0.220	-0.019	0.307
290 pi+	211	1	52	-1	-1	-1	0.061	0.041	-1.218	1.228
291 pi0	111	2	52	-1	126	127	-0.145	0.055	0.004	0.206
292 Lambda0_bar	-3122	1	53	-1	-1	-1	0.068	-0.467	-3.016	3.250
293 pi0	111	2	53	-1	128	129	0.053	0.049	-1.162	1.172
294 gamma	22	1	54	-1	-1	-1	-0.658	-0.235	-2.264	2.369
295 gamma	22	1	54	-1	-1	-1	0.054	0.451	-1.491	1.559
296 k-	-321	1	55	-1	-1	-1	-0.079	-0.085	-10.783	10.795
297 pi+	211	1	55	-1	-1	-1	-0.066	0.410	-6.156	6.172
298 pi-	-211	1	56	-1	-1	-1	0.049	-0.368	-1.619	1.666
299 pi+	211	1	56	-1	-1	-1	-0.230	0.124	-4.146	4.157
300 gamma	22	1	58	-1	-1	-1	0.183	0.166	-8.096	8.100
301 gamma										
302 gamma	22	1	61	-1	-1	-1	0.035	0.161	-3.127	3.132
303 gamma	22	1	61	-1	-1	-1	-0.020	-0.018	-0.963	0.964
304 gamma	22	1	63	-1	-1	-1	-0.362	0.043	-2.922	2.945
305 gamma	22	1	63	-1	-1	-1	0.001	-0.018	-0.079	0.081
306 gamma	22	1	79	-1	-1	-1	-0.132	0.246	0.452	0.531
307 gamma	22	1	79	-1	-1	-1	-0.041	0.053	0.022	0.070
308 gamma	22	1	81	-1	-1	-1	-0.012	-0.123	4.228	4.230
309 gamma	0.007	0.007	81	-1	-1	-1	0.006	-0.112	11.320	11.321
310 gamma	0.007	0.007	83	-1	-1	-1	-0.007	0.146	7.844	7.846
311 gamma	0.002	0.002	83	-1	-1	-1	0.020	0.305	8.810	8.816
312 gamma	0.002	0.002	87	-1	-1	-1	0.210	0.277	96.768	96.769
313 gamma	0.029	0.029	87	-1	-1	-1	0.090	0.070	17.080	17.080
314 gamma	0.029	0.029	97	-1	-1	-1	-0.125	-0.177	0.150	0.263
315 gamma			97	-1	-1	-1	0.025	-0.060	0.004	0.065
316 gamma			101	-1	-1	-1	-0.042	0.028	0.066	0.083
317 gamma			101	-1	-1	-1	-0.103	0.027	-0.061	0.123
318 gamma			103	-1	-1	-1	0.074	0.006	-1.009	1.011

319 gamma 22 1 103 -1 -1 -1 -0.021 0.043 -0.153 0.161

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\*\*\* Run,Event: 276181,1778 Rs: 1 : >>> TStnAna: Processed 549000 events

interaction 0											
i	name	PDG	SC	FM	SM	FD	SD	px	py	pz	e
0	proton	2212	3	-1	-1	-1	-1	980	980		
1	antiproton	-2212	3	-1	-1	-1	-1	-980	980		
2	u	2	3	0	-1	-1	-1	-0.961	0.951	96.762	96.772
3	g	21	3	1	-1	-1	-1	-0.109	0.359	-85.781	85.782
4	u	2	3	2	-1	-1	-1	-0.302	0.534	76.868	76.870
5	d_bar	-1	3	3	-1	-1	-1	-10.005	-15.503	-14.712	23.599
6	w+	24	3	4	5	-1	-1	-10.308	-14.970	62.156	100.469
7	e+	-11	3	6	-1	-1	-1	23.179	5.049	-3.616	23.996
8	nu_e	12	3	6	-1	-1	-1	-33.486	-20.019	65.772	76.473
<b>9</b>	<b>w+</b>	<b>24</b>	<b>2</b>	<b>6</b>	<b>-1</b>	<b>10</b>	<b>12</b>	<b>-10.308</b>	<b>-14.970</b>	<b>62.156</b>	<b>100.469</b>
<b>10</b>	<b>nu_e</b>	<b>12</b>	<b>1</b>	<b>8</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-33.486</b>	<b>-20.019</b>	<b>65.772</b>	<b>76.473</b>
<b>11</b>	<b>e+</b>	<b>-11</b>	<b>1</b>	<b>7</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>23.179</b>	<b>5.049</b>	<b>-3.616</b>	<b>23.996</b>
12	gamma	22	1	7	-1	-1	-1		-		
13	d	1	2	3	-1	30	30	1.113	1.817	-33.866	33.935
14	d_bar	-1	2	1	-1	30	30	0.093	-0.308	-316.911	316.911
15	ud_0	2101	2	0	-1	36	36	0.961	-0.951	883.231	883.233
16	g	21	2	2	-1	36	36	-0.841	-0.243	4.496	4.580
17	g	21	2	2	-1	36	36	0.143	0.402	0.154	0.454
18	g	21	2	3	-1	36	36	0.136	-0.197	0.298	0.382
19	g	21	2	3	-1	36	36	-0.253	0.254	0.028	0.359
20	g	21	2	3	-1	36	36	-0.004	6.232	-2.720	6.800
21	g	21	2	3	-1	36	36	0.721	3.646	-1.022	3.855
22	g	21	2	3	-1	36	36	-0.436	3.189	-0.793	3.315
23	g	21	2	3	-1	36	36	-0.329	0.483	0.101	0.593
24	g	21	2	3	-1	36	36	0.277	0.342	0.226	0.495
25	g	21	2	3	-1	36	36	9.415	1.828	-2.066	9.811
26	g	21	2	3	-1	36	36	1.213	-1.819	-1.358	2.574
27	g	21	2	3	-1	36	36	-0.510	0.682	-1.679	1.883
28	g	21	2	3	-1	36	36	-1.408	-0.336	-12.970	13.050

29 uu_1_bar	-2203	2	1	-1	36	36	0.016	-0.052	-577.302	577.302
<b>30 string</b>	<b>92</b>	<b>2</b>	<b>13</b>	<b>14</b>	<b>31</b>	<b>35</b>	<b>1.206</b>	<b>1.509</b>	<b>-350.777</b>	<b>350.846</b>
31 omega	223	2	30	-1	72	73	0.827	1.035	-25.207	25.254
<b>32 pi-</b>	<b>-211</b>	<b>1</b>	<b>30</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.182</b>	<b>0.366</b>	<b>-26.636</b>	<b>26.639</b>
<b>33 proton</b>	<b>2212</b>	<b>1</b>	<b>30</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.162</b>	<b>-0.205</b>	<b>-71.289</b>	<b>71.296</b>
<b>34 antiproton</b>	<b>-2212</b>	<b>1</b>	<b>30</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.079</b>	<b>0.581</b>	<b>-60.081</b>	<b>60.091</b>
35 rho+	213	2	30	-1	74	75	-0.043	-0.268	-167.565	167.567
<b>36 string</b>	<b>92</b>	<b>2</b>	<b>15</b>	<b>29</b>	<b>37</b>	<b>71</b>	<b>9.102</b>	<b>13.460</b>	<b>288.622</b>	<b>1508.685</b>
37 pi+	211	1	36	-1	-1	-1	0.756	-0.273	120.551	120.554
38 neutron	2112	1	36	-1	-1	-1	-0.300	-0.200	213.407	213.409
39 rho-	-213	2	36	-1	76	77	0.251	0.167	282.160	282.161
40 k*0_bar	-313	2	36	-1	78	79	0.295	-0.503	136.408	136.413
41 sigma-	-3222	1	36	-1	-1	-1	-0.316	-0.285	47.092	47.109
42 Delta+	2214	2	36	-1	80	81	-0.282	-0.211	32.410	32.435
43 pi0	111	2	36	-1	82	83	-0.037	0.060	50.196	50.197
44 rho+	213	2	36	-1	84	85	0.195	0.275	1.768	1.928
45 rho-	-213	2	36	-1	86	87	-0.172	0.069	3.548	3.621
46 omega	223	2	36	-1	88	89	0.021	1.391	-0.616	1.712
47 rho+	213	2	36	-1	90	91	-1.004	1.707	0.203	2.131
48 pi0	111	2	36	-1	92	93	1.084	1.035	-0.597	1.619
49 rho-	-213	2	36	-1	94	95	-0.107	6.052	-1.789	6.377
50 rho+	213	2	36	-1	96	97	-0.130	1.250	-0.487	1.548
51 rho-	-213	2	36	-1	98	99	1.310	1.055	-0.487	1.925
52 pi+	211	1	36	-1	-1	-1	-0.492	0.751	-0.193	0.928
53 pi-	-211	1	36	-1	-1	-1	3.096	0.470	-1.101	3.322
54 eta	221	2	36	-1	100	101	1.164	1.037	0.191	1.664
55 rho+	213	2	36	-1	102	103	1.075	0.066	-0.451	1.376
56 rho-	-213	2	36	-1	104	105	1.315	-0.389	0.081	1.618
57 rho+	213	2	36	-1	106	107	1.081	0.609	-1.493	2.066
58 rho0	113	2	36	-1	108	109	0.354	-0.081	-0.079	0.784
59 eta'	331	2	36	-1	110	111	1.445	-0.314	-0.575	1.853
60 pi0	111	2	36	-1	112	113	0.187	0.286	-1.856	1.893

61 rho-	-213	2	36	-1	114	115	-0.626	-0.799	-4.081	4.231
62 pi+	211	1	36	-1	-1	-1	-0.024	0.239	-4.764	4.772
63 pi-	-211	1	36	-1	-1	-1	0.340	-0.119	-0.819	0.905
64 pi+	211	1	36	-1	-1	-1	-0.659	0.526	-9.472	9.511
65 omega	223	2	36	-1	116	118	0.046	-0.463	-50.986	50.994
66 pi0	111	2	36	-1	119	120	-0.120	0.665	-6.382	6.419
67 pi-	-211	1	36	-1	-1	-1	-0.517	-0.786	-24.262	24.281
68 rho+	213	2	36	-1	121	122	0.271	-0.413	-70.673	70.679
69 rho-	-213	2	36	-1	123	124	-0.562	1.143	-78.893	78.907
70 Delta-	-2214	2	36	-1	125	126	0.097	-0.545	-223.566	223.570
71 rho0	113	2	36	-1	127	128	0.065	-0.013	-115.771	115.773
72 gamma	22	1	31	-1	-1	-1	0.302	0.640	-18.520	18.533
73 pi0	111	2	31	-1	129	130	0.525	0.395	-6.687	6.720
74 pi+	211	1	35	-1	-1	-1	-0.230	-0.276	-62.119	62.120
75 pi0	111	2	35	-1	131	132	0.187	0.009	-105.446	105.447
76 pi-	-211	1	39	-1	-1	-1	0.109	-0.167	205.516	205.516
77 pi0	111	2	39	-1	133	134	0.143	0.334	76.644	76.645
78 K0_bar	-311	2	40	-1	135	135	0.446	-0.037	58.045	58.049
79 pi0	111	2	40	-1	136	137	-0.151	-0.466	78.363	78.365
<b>80 neutron</b>	<b>2112</b>	<b>1</b>	<b>42</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.135</b>	<b>-0.089</b>	<b>19.551</b>	<b>19.574</b>
<b>81 pi+</b>	<b>211</b>	<b>1</b>	<b>42</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.147</b>	<b>-0.123</b>	<b>12.859</b>	<b>12.861</b>
<b>82 gamma</b>	<b>22</b>	<b>1</b>	<b>43</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>0.025</b>	<b>0.007</b>	<b>35.172</b>	<b>35.172</b>
- <b>83 gamma</b>	<b>22</b>	<b>1</b>	<b>43</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.062</b>	<b>0.053</b>	<b>15.024</b>	<b>15.024</b>
- <b>84 pi+</b>	<b>211</b>	<b>1</b>	<b>44</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.227</b>	<b>0.065</b>	<b>0.744</b>	<b>0.793</b>
85 pi0	111	2	44	-1	138	139	0.422	0.210	1.024	1.135
<b>86 pi-</b>	<b>-211</b>	<b>1</b>	<b>45</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.329</b>	<b>0.083</b>	<b>1.020</b>	<b>1.084</b>
87 pi0	111	2	45	-1	140	141	0.157	-0.014	2.528	2.537
88 gamma	22	1	46	-1	-1	-1	0.191	0.448	-0.560	0.742
89 pi0	111	2	46	-1	142	143	-0.169	0.943	-0.056	0.970
90 pi+	211	1	47	-1	-1	-1	-0.585	1.496	0.280	1.636
91 pi0	111	2	47	-1	144	145	-0.419	0.212	-0.077	0.495
92 gamma	22	1	48	-1	-1	-1	0.921	0.936	-0.540	1.419

93	gamma		22	1	48	-1	-1	-1	0.164	0.100	-0.057	0.200
94	pi-		-211	1	49	-1	-1	-1	0.038	5.625	-1.796	5.907
95	pi0		111	2	49	-1	146	147	-0.145	0.427	0.007	0.471
96	pi+		211	1	50	-1	-1	-1	0.036	0.950	-0.031	0.962
97	pi0		111	2	50	-1	148	149	-0.166	0.299	-0.456	0.586
98	pi-		-211	1	51	-1	-1	-1	1.351	1.038	-0.501	1.782
99	pi0		111	2	51	-1	150	151	-0.042	0.017	0.014	0.143
100	gamma		22	1	54	-1	-1	-1	0.793	0.356	0.180	0.888
101	gamma		22	1	54	-1	-1	-1	0.371	0.681	0.011	0.776
102	pi+		211	1	55	-1	-1	-1	0.534	0.197	-0.539	0.796
103	pi0		111	2	55	-1	152	153	0.541	-0.131	0.088	0.579
104	pi-		-211	1	56	-1	-1	-1	0.811	-0.588	-0.132	1.020
105	pi0		111	2	56	-1	154	155	0.504	0.199	0.213	0.597
106	pi+		211	1	57	-1	-1	-1	0.548	0.420	-0.358	0.790
107	pi0		111	2	57	-1	156	157	0.533	0.189	-1.136	1.276
108	pi-		-211	1	58	-1	-1	-1	0.226	0.094	0.242	0.372
109	pi+		211	1	58	-1	-1	-1	0.128	-0.175	-0.322	0.412
110	gamma		22	1	59	-1	-1	-1	0.088	0.011	0.039	0.097
111	rho0		113	2	59	-1	158	159	1.357	-0.324	-0.614	1.756
112	gamma		22	1	60	-1	-1	-1	0.045	0.187	-0.882	0.902
-0.001	0.001											
113	gamma		22	1	60	-1	-1	-1	0.142	0.099	-0.975	0.990
-0.001	0.001											
114	pi-		-211	1	61	-1	-1	-1	-0.199	-0.549	-2.376	2.451
115	pi0		111	2	61	-1	160	161	-0.426	-0.250	-1.705	1.781
116	pi+		211	1	65	-1	-1	-1	0.101	-0.447	-24.282	24.287
117	pi-		-211	1	65	-1	-1	-1	0.085	-0.028	-19.368	19.369
118	pi0		111	2	65	-1	162	163	-0.140	0.012	-7.335	7.338
119	gamma		22	1	66	-1	-1	-1	-0.082	0.361	-2.876	2.899
-0.001	0.001											
120	gamma		22	1	66	-1	-1	-1	-0.038	0.304	-3.506	3.520
-0.001	0.001											
121	pi+		211	1	68	-1	-1	-1	-0.102	-0.255	-10.941	10.946
122	pi0		111	2	68	-1	164	165	0.373	-0.158	-59.731	59.733
123	pi-		-211	1	69	-1	-1	-1	-0.220	0.106	-7.485	7.490
124	pi0		111	2	69	-1	166	167	-0.342	1.037	-71.409	71.417

125 antiproton			-2212	1	70	-1	-1	-1	0.157	-0.326	-195.682	195.684
126 pi0			111	2	70	-1	168	169	-0.060	-0.219	-27.885	27.886
127 pi+			211	1	71	-1	-1	-1	0.130	-0.163	-104.677	104.677
128 pi-			-211	1	71	-1	-1	-1	-0.065	0.150	-11.094	11.096
129 gamma			22	1	73	-1	-1	-1	0.191	0.195	-2.250	2.267
-0.005 0.005			22	1	73	-1	-1	-1	0.335	0.200	-4.437	4.454
130 gamma			22	1	73	-1	-1	-1	0.199	-0.010	-101.097	101.097
-0.005 0.005			22	1	75	-1	-1	-1	-0.012	0.019	-4.349	4.349
131 gamma			22	1	75	-1	-1	-1	0.114	0.140	45.994	45.994
-0.011 0.011			22	1	77	-1	-1	-1	0.029	0.193	30.650	30.651
132 gamma			22	1	77	-1	-1	-1	0.446	-0.037	58.045	58.049
-0.011 0.011			22	1	79	-1	-1	-1	-0.003	0.010	1.280	1.280
133 gamma			22	1	79	-1	-1	-1	-0.148	-0.475	77.083	77.085
0.001 0.001			22	1	85	-1	-1	-1	0.239	0.180	0.712	0.772
134 gamma			22	1	85	-1	-1	-1	0.183	0.029	0.313	0.363
0.001 0.001			22	1	87	-1	-1	-1	-0.037	0.917	0.918	-
135 K_s0			310	1	87	-1	-1	-1	0.157	0.022	1.611	1.619
136 gamma			22	1	87	-1	-1	-1	-0.051	0.211	0.042	0.221
- - 0.016 0.016			22	1	89	-1	-1	-1	-0.118	0.733	-0.098	0.749
137 gamma			22	1	89	-1	-1	-1	-0.120	0.081	0.036	0.150
- - 0.016 0.016			22	1	91	-1	-1	-1	-0.299	0.130	-0.113	0.345
138 gamma			22	1	91	-1	-1	-1	-0.015	0.128	0.057	0.141
0.001 0.001			22	1	95	-1	-1	-1	-0.130	0.299	-0.050	0.330
139 gamma			22	1	95	-1	-1	-1	-0.056	0.076	-0.235	0.253
0.001 0.001			22	1	97	-1	-1	-1	-0.109	0.223	-0.222	0.333
140 gamma			22	1	97	-1	-1	-1	-0.080	-0.027	0.009	0.085
141 gamma			22	1	99	-1	-1	-1	0.038	0.044	0.005	0.058
- - 0.001 - 0.001			22	1	99	-1	-1	-1	0.365	-0.023	0.045	0.368
142 gamma			22	1	103	-1	-1	-1	0.176	-0.108	0.043	0.211
- - 0.001 - 0.001			22	1	103	-1	-1	-1	0.151	-0.004	0.063	0.164
143 gamma			22	1	105	-1	-1	-1	0.353	0.203	0.150	0.434
- - 0.001 - 0.001			22	1	105	-1	-1	-1	0.434	0.163	-0.795	0.920
144 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
145 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
146 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
147 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
148 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
149 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
150 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
151 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
152 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
153 gamma			22	1	107	-1	-1	-1				
- - 0.001 - 0.001			22	1	107	-1	-1	-1				
154 gamma			22	1	107	-1	-1	-1				
0.001			22	1	107	-1	-1	-1				
155 gamma			22	1	107	-1	-1	-1				
0.001			22	1	107	-1	-1	-1				
156 gamma			22	1	107	-1	-1	-1				
-			22	1	107	-1	-1	-1				

157	gamma		22	1	107	-1	-1	-1	0.100	0.026	-0.340	0.356		
158	pi-		-211	1	111	-1	-1	-1	0.156	-0.364	-0.054	0.423		
159	pi+		211	1	111	-1	-1	-1	1.201	0.039	-0.560	1.333		
160	gamma		22	1	115	-1	-1	-1	-0.175	-0.061	-0.455	0.491		
161	gamma		22	1	115	-1	-1	-1	-0.251	-0.189	-1.250	1.289		
162	gamma		22	1	118	-1	-1	-1	-0.074	-0.012	-6.187	6.187		
163	gamma		22	1	118	-1	-1	-1	-0.066	0.024	-1.149	1.151		
164	gamma		22	1	122	-1	-1	-1	0.165	-0.066	-17.183	17.184		
165	gamma	-0.048	0.048		22	1	122	-1	-1	-1	0.208	-0.092	-42.548	42.549
166	gamma	-0.048	0.048		22	1	124	-1	-1	-1	-0.173	0.533	-32.266	32.271
167	gamma	0.001	-0.039	0.039	22	1	124	-1	-1	-1	-0.169	0.504	-39.143	39.146
168	gamma	0.001	-0.039	0.039	22	1	126	-1	-1	-1	0.034	-0.024	-7.133	7.133
169	gamma	-0.002	0.002		22	1	126	-1	-1	-1	-0.094	-0.195	-20.752	20.753
		-0.002	0.002											
----- interaction 1 -----														
170	proton		2212	3		-1	-1	-1	-1	980	980			
171	antiproton		-2212	3		-1	-1	-1	-1	-980	980			
172	u		2	3		0	-1	-1	-1	-0.192	-0.294	8.807	8.814	
173	d		1	3		1	-1	-1	-1	0.195	-0.091	-1.121	1.141	
174	u		2	3		2	-1	-1	-1	-0.192	-0.294	8.807	8.814	
175	d		1	3		3	-1	-1	-1	0.195	-0.091	-1.121	1.141	
176	u		2	3		4	5	-1	-1	2.643	-1.386	5.838	6.564	
177	d		1	3		4	5	-1	-1	-2.640	1.002	1.849	3.391	
178	antineutron		-2112	1		1	-1	-1	-1	-0.122	0.501	-332.973	332.975	
179	d		1	2		7	-1	14	14	-2.441	0.926	1.713	3.140	
180	ud_0		2101	2		0	-1	14	14	0.192	0.294	971.178	971.178	
181	u		2	2		6	-1	28	28	2.397	-0.580	5.112	5.686	
182	g		21	2		6	-1	28	28	0.047	-0.730	0.861	1.130	
183	u_bar		-2	2		1	-1	28	28	-0.073	-0.410	-645.891	645.892	
184	string		92	2		9	10	15	27	-2.249	1.220	972.891	974.318	
185	omega		223	2		14	-1	45	47	-1.609	0.175	0.948	2.033	
186	omega		223	2		14	-1	48	50	-0.359	0.466	2.168	2.375	
187	pi-		-211	1		14	-1	-1	-1	0.391	0.204	4.626	4.649	
188	pi+		211	1		14	-1	-1	-1	-0.824	-0.014	6.895	6.946	
189	pi-		-211	1		14	-1	-1	-1	-0.047	-0.177	31.327	31.328	

190 pi+	211	1	14	-1	-1	-1	0.303	0.002	3.597	3.613
191 rho0	113	2	14	-1	51	52	-0.687	0.269	21.200	21.220
192 rho-	-213	2	14	-1	53	54	0.266	-0.238	27.296	27.310
193 rho+	213	2	14	-1	55	56	0.214	0.165	164.139	164.143
<b>194 pi-</b>	<b>-211</b>	<b>1</b>	<b>14</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-0.068</b>	<b>0.169</b>	<b>27.694</b>	<b>27.695</b>
195 pi0	111	2	14	-1	57	58	-0.206	0.167	20.144	20.146
196 Delta++	2224	2	14	-1	59	60	0.247	0.405	401.168	401.171
197 rho-	-213	2	14	-1	61	62	0.131	-0.372	261.689	261.690
198 string	92	2	11	13	29	44	2.371	-1.720	-639.918	652.707
199 pi+	211	1	28	-1	-1	-1	-0.216	-0.262	0.625	0.725
200 Sigma-	3112	1	28	-1	-1	-1	1.848	-0.360	1.971	2.977
201 K*0	313	2	28	-1	63	64	0.152	-0.356	1.513	1.799
202 Delta+	-1114	2	28	-1	65	66	0.328	-0.114	0.726	1.414
203 pi0	111	2	28	-1	67	68	0.536	0.398	-0.711	0.985
204 pi-	-211	1	28	-1	-1	-1	-0.507	-0.694	-0.960	1.296
205 proton	2212	1	28	-1	-1	-1	0.249	0.062	-2.930	3.087
206 antineutron	-2112	1	28	-1	-1	-1	-0.149	-0.395	-3.512	3.660
207 omega	223	2	28	-1	69	71	0.388	0.737	-9.185	9.255
208 pi-	-211	1	28	-1	-1	-1	0.381	-0.466	-4.857	4.896
209 pi+	211	1	28	-1	-1	-1	-0.350	0.047	-29.657	29.659
210 pi0	111	2	28	-1	72	73	-0.001	-0.181	-16.199	16.201
211 rho-	-213	2	28	-1	74	75	-0.068	0.493	-61.315	61.322
212 pi+	211	1	28	-1	-1	-1	-0.349	-0.382	-70.195	70.197
213 eta	221	2	28	-1	76	78	0.311	0.219	-68.002	68.005
214 pi-	-211	1	28	-1	-1	-1	-0.182	-0.466	-377.229	377.230
215 pi-	-211	1	15	-1	-1	-1	-0.760	0.249	0.672	1.054
216 pi+	211	1	15	-1	-1	-1	-0.422	-0.125	0.255	0.527
217 pi0	111	2	15	-1	79	80	-0.427	0.051	0.021	0.452
218 pi-	-211	1	16	-1	-1	-1	-0.204	0.136	1.469	1.496
219 pi+	211	1	16	-1	-1	-1	-0.133	0.320	0.610	0.716
220 pi0	111	2	16	-1	81	82	-0.023	0.010	0.089	0.163
221 pi-	-211	1	21	-1	-1	-1	-0.318	-0.038	13.193	13.197



222	pi+		211	1	21	-1	-1	-1	-0.369	0.307	8.007	8.023		
223	pi-		-211	1	22	-1	-1	-1	0.275	-0.085	3.745	3.759		
224	pi0		111	2	22	-1	83	84	-0.009	-0.152	23.551	23.552		
225	pi+		211	1	23	-1	-1	-1	0.576	0.340	123.653	123.655		
226	pi0		111	2	23	-1	85	86	-0.362	-0.175	40.486	40.488		
227	gamma		22	1	25	-1	-1	-1	-0.162	0.098	17.244	17.245		
-	228	gamma	0.005	0.005	22	1	25	-1	-1	-1	-0.044	0.069	2.900	2.901
-	229	proton	0.005	0.005	2212	1	26	-1	-1	-1	0.331	0.604	320.241	320.243
230	pi+		211	1	26	-1	-1	-1	-0.084	-0.199	80.928	80.928		
231	pi-		-211	1	27	-1	-1	-1	-0.020	0.213	62.856	62.857		
232	pi0		111	2	27	-1	87	88	0.151	-0.585	198.832	198.833		
233	k0		311	2	31	-1	89	89	0.274	-0.408	1.430	1.592		
234	pi0		111	2	31	-1	90	91	-0.122	0.052	0.082	0.207		
235	antineutron		-2112	1	32	-1	-1	-1	0.389	0.006	0.579	1.170		
236	pi+		211	1	32	-1	-1	-1	-0.062	-0.120	0.147	0.243		
237	gamma		22	1	33	-1	-1	-1	0.135	0.060	-0.228	0.272		
-	238	gamma		22	1	33	-1	-1	-1	0.401	0.338	-0.483	0.713	
-	239	pi-		-211	1	37	-1	-1	-1	-0.066	0.048	-1.069	1.081	
240	pi+		211	1	37	-1	-1	-1	0.140	0.516	-3.615	3.657		
241	pi0		111	2	37	-1	92	93	0.313	0.173	-4.501	4.517		
242	gamma		22	1	40	-1	-1	-1	0.010	-0.055	-1.493	1.494		
-	243	gamma	-0.001	0.001	22	1	40	-1	-1	-1	-0.010	-0.126	-14.706	14.707
-	244	pi-	-0.001	0.001	-211	1	41	-1	-1	-1	0.178	-0.115	-18.498	18.500
245	pi0		111	2	41	-1	94	95	-0.245	0.608	-42.817	42.822		
246	gamma		22	1	43	-1	-1	-1	0.052	-0.004	-14.186	14.186		
247	pi-		-211	1	43	-1	-1	-1	0.103	0.112	-43.375	43.375		
248	pi+		211	1	43	-1	-1	-1	0.155	0.111	-10.441	10.444		
249	gamma		22	1	47	-1	-1	-1	-0.207	-0.036	0.040	0.214		
-	250	gamma		22	1	47	-1	-1	-1	-0.220	0.087	-0.020	0.238	
-	251	gamma		22	1	50	-1	-1	-1	-0.045	-0.051	0.066	0.095	
-	252	gamma		22	1	50	-1	-1	-1	0.022	0.061	0.023	0.069	
-	253	gamma		22	1	54	-1	-1	-1	-0.019	-0.173	22.212	22.213	

-	-	0.003	0.003											
-	254	gamma		22	1	54	-1	-1	-1	0.010	0.021	1.338	1.339	
-	255	gamma		22	1	56	-1	-1	-1	-0.018	-0.057	4.938	4.938	
-	256	gamma		22	1	56	-1	-1	-1	-0.344	-0.118	35.549	35.550	
-	257	gamma		22	1	62	-1	-1	-1	0.033	-0.041	29.854	29.854	
-	258	gamma	0.002	22	1	62	-1	-1	-1	0.118	-0.544	168.978	168.979	
-	259	K_L0	0.002	130	1	63	-1	-1	-1	0.274	-0.408	1.430	1.592	
-	260	gamma		22	1	64	-1	-1	-1	0.019	-0.023	0.015	0.033	
-	261	gamma		22	1	64	-1	-1	-1	-0.141	0.074	0.067	0.173	
-	262	gamma		22	1	71	-1	-1	-1	0.092	0.121	-2.115	2.120	
-	263	gamma	0.001	22	1	71	-1	-1	-1	0.221	0.053	-2.386	2.397	
-	264	gamma	0.001	22	1	75	-1	-1	-1	-0.216	0.574	-37.232	37.237	
-	265	gamma	-0.002	22	1	75	-1	-1	-1	-0.029	0.034	-5.585	5.585	
-			0.002											
-			0.002											
-----				interaction 2				-----						
266	proton			2212	3		-1	-1	-1	-1		980	980	
267	antiproton			-2212	3		-1	-1	-1	-1		-980	980	
268	g			21	3		0	-1	-1	-1	0.548	-1.017	72.407	72.416
269	g			21	3		1	-1	-1	-1	0.405	0.353	-34.173	34.177
270	d			1	3		2	-1	-1	-1	1.322	-0.859	19.877	19.939
271	g			21	3		3	-1	-1	-1	0.991	-0.650	-8.941	9.019
272	d			1	3		4	5	-1	-1	1.991	6.862	17.114	18.549
273	g			21	3		4	5	-1	-1	0.322	-8.371	-6.179	10.409
274	d_bar			-1	2		2	-1	24	24	-0.955	1.751	9.113	9.335
275	d			1	2		0	-1	24	24	-0.539	0.860	9.003	9.066
276	d			1	2		6	-1	32	32	0.891	4.482	13.580	14.332
277	g			21	2		6	-1	32	32	1.029	2.036	2.830	3.635
278	g			21	2		7	-1	32	32	-1.007	-2.519	-1.622	3.161
279	g			21	2		7	-1	32	32	1.370	-2.621	-2.791	4.067
280	g			21	2		7	-1	32	32				
281	g	0.514	-2.867	-1.338	3.206		7	-1	32	32	-0.484	-0.019	0.277	0.558
282	g			21	2		3	-1	32	32	0.622	-0.267	-0.868	1.101
283	g			21	2		3	-1	32	32	-1.217	1.275	-23.985	24.050
284	u_bar			-2	2		1	-1	32	32	-0.444	-0.438	-128.563	128.565
285	uu_1			2203	2		0	-1	26	26	-0.009	0.157	898.550	898.551

286	g	21	2	2	-1	28	28	-0.451	-0.124	5.615	5.634
287	g	21	2	2	-1	29	29	0.928	-1.790	36.312	36.368
288	g	21	2	2	-1	30	30	-0.287	-0.001	1.111	1.148
289	ud_0_bar	-2101	2	1	-1	31	31	0.039	0.085	-817.225	817.225
290	cluster	91	2	8	9	25	25	-1.494	2.611	18.117	18.401
291	eta	221	2	24	-1	53	54	-0.706	1.234	8.560	8.694
292	uu_1	2203	2	19	-1	55	55	-0.009	0.157	898.550	898.551
293	g	21	2	24	-1	55	55	-0.788	1.377	9.557	9.707
294	g	21	2	20	-1	55	55	-0.451	-0.124	5.615	5.634
295	g	21	2	21	-1	55	55	0.928	-1.790	36.312	36.368
296	g	21	2	22	-1	55	55	-0.287	-0.001	1.111	1.148
297	ud_0_bar	-2101	2	23	-1	55	55	0.039	0.085	-817.225	817.225
298	string	92	2	10	18	33	52	1.274	-0.938	-142.480	182.673
299	pi0	111	2	32	-1	70	71	-0.139	0.397	1.084	1.171
300	pi-	-211	1	32	-1	-1	-1	0.811	4.116	10.455	11.267
301	rho+	213	2	32	-1	72	73	0.734	0.475	1.174	1.615
302	pi-	-211	1	32	-1	-1	-1	-0.210	-0.109	1.328	1.356
303	sigma*+	3224	2	32	-1	74	75	0.134	0.883	1.437	2.180
304	sigma*0_bar	-3214	2	32	-1	76	77	0.105	-1.259	-0.393	1.902
305	pi0	111	2	32	-1	78	79	0.370	-0.786	-1.260	1.536
306	rho-	-213	2	32	-1	80	81	0.339	-1.340	-0.113	1.670
307	proton	2212	1	32	-1	-1	-1	-1.051	-1.288	-0.494	1.972
308	pi0	111	2	32	-1	82	83	0.687	-0.752	-1.304	1.660
309	antiproton	-2212	1	32	-1	-1	-1	0.468	-1.290	-1.071	1.978
310	pi+	211	1	32	-1	-1	-1	0.346	-0.566	-0.708	0.981
311	pi-	-211	1	32	-1	-1	-1	-0.013	0.230	-1.534	1.557
312	rho+	213	2	32	-1	84	85	-0.087	-0.192	-0.436	0.874
313	rho0	113	2	32	-1	86	87	-0.337	-0.205	-5.590	5.663
314	k0	311	2	32	-1	88	88	-0.155	0.517	-1.734	1.883
315	k0_bar	-311	2	32	-1	89	89	0.249	0.589	-9.850	9.883
316	pi-	-211	1	32	-1	-1	-1	-0.446	-0.311	-3.713	3.756
317	pi0	111	2	32	-1	90	91	0.297	0.130	-13.356	13.361

318 eta'		331	2	32	-1	92	94	-0.827	-0.176	-116.404	116.411
319 gamma		22	1	25	-1	-1	-1	-0.169	0.220	0.730	0.781
320 gamma		22	1	25	-1	-1	-1	-0.537	1.014	7.829	7.913
321 string		92	2	26	31	56	69	-0.568	-0.296	133.920	1768.633
322 pi+		211	1	55	-1	-1	-1	-0.294	0.060	121.671	121.672
323 Delta+		2214	2	55	-1	95	96	0.761	-0.086	663.848	663.850
324 antiproton		-2212	1	55	-1	-1	-1	-0.664	0.266	35.355	35.374
325 neutron		2112	1	55	-1	-1	-1	0.587	0.057	71.661	71.669
326 pi+		211	1	55	-1	-1	-1	-0.935	-0.177	9.614	9.662
327 pi0		111	2	55	-1	97	98	-0.183	1.073	9.969	10.030
328 pi0		111	2	55	-1	99	100	-0.315	0.011	1.683	1.718
329 rho-		-213	2	55	-1	101	102	0.615	-1.230	26.261	26.307
330 rho+		213	2	55	-1	103	104	0.227	-0.252	10.933	10.968
331 pi0		111	2	55	-1	105	107	-0.751	-0.463	-1.224	1.515
332 pi-		-211	1	55	-1	-1	-1	0.592	0.883	-50.737	50.749
333 pi0		111	2	55	-1	108	109	-0.079	-0.424	-55.207	55.209
334 eta'		331	2	55	-1	110	112	-0.066	-0.265	-206.964	206.966
335 antineutron		-2112	1	55	-1	-1	-1	-0.064	0.250	-502.944	502.945
336 gamma		22	1	33	-1	-1	-1	0.020	0.058	0.229	0.237
337 gamma		22	1	33	-1	-1	-1	-0.159	0.338	0.855	0.933
338 pi+		211	1	35	-1	-1	-1	0.495	0.059	0.271	0.584
339 pi0		111	2	35	-1	113	114	0.239	0.416	0.903	1.031
340 Lambda0		3122	1	37	-1	-1	-1	-0.041	0.567	1.105	1.670
341 pi+		211	1	37	-1	-1	-1	0.174	0.316	0.332	0.510
342 Lambda0_bar		-3122	1	38	-1	-1	-1	0.027	-1.001	-0.136	1.505
343 pi0		111	2	38	-1	115	116	0.078	-0.258	-0.258	0.396
344 gamma		22	1	39	-1	-1	-1	0.166	-0.488	-0.799	0.951
345 gamma		22	1	39	-1	-1	-1	0.203	-0.298	-0.460	0.585
346 pi-		-211	1	40	-1	-1	-1	-0.069	-0.496	-0.426	0.672
347 pi0		111	2	40	-1	117	118	0.408	-0.844	0.314	0.998
348 gamma		22	1	42	-1	-1	-1	0.680	-0.719	-1.283	1.620
0.001 -0.001 -0.001 0.001		22	1	42	-1	-1	-1	0.007	-0.033	-0.021	0.040
349 gamma		22	1	42	-1	-1	-1	0.007	-0.033	-0.021	0.040
0.001 -0.001 -0.001 0.001		22	1	42	-1	-1	-1	0.007	-0.033	-0.021	0.040

350 pi+			211	1	46	-1	-1	-1	0.150	0.029	-0.479	0.521
351 pi0			111	2	46	-1	119	120	-0.236	-0.221	0.043	0.353
352 pi+			211	1	47	-1	-1	-1	-0.544	0.010	-4.029	4.068
353 pi-			-211	1	47	-1	-1	-1	0.208	-0.214	-1.561	1.595
354 K_L0			130	1	48	-1	-1	-1	-0.155	0.517	-1.734	1.883
355 K_L0			130	1	49	-1	-1	-1				
0.249	0.589	-9.850	9.883									
356 gamma			22	1	51	-1	-1	-1	0.119	-0.010	-5.765	5.766
357 gamma			22	1	51	-1	-1	-1	0.178	0.140	-7.591	7.594
358 pi-			-211	1	52	-1	-1	-1	-0.308	-0.015	-32.638	32.640
359 pi+			211	1	52	-1	-1	-1	-0.295	-0.034	-33.936	33.938
360 eta			221	2	52	-1	121	123	-0.224	-0.127	-49.829	49.833
361 proton			2212	1	57	-1	-1	-1	0.490	-0.124	467.477	467.478
362 pi0			111	2	57	-1	124	125	0.272	0.038	196.371	196.371
363 gamma			22	1	61	-1	-1	-1	-0.097	0.873	8.153	8.200
0.001	0.012	0.012										
364 gamma			22	1	61	-1	-1	-1	-0.085	0.201	1.816	1.829
0.001	0.012	0.012										
365 gamma			22	1	62	-1	-1	-1	-0.308	-0.009	1.650	1.678
366 gamma			22	1	62	-1	-1	-1	-0.007	0.020	0.033	0.040
367 pi-			-211	1	63	-1	-1	-1	0.512	-0.651	10.328	10.362
368 pi0			111	2	63	-1	126	127	0.104	-0.579	15.933	15.945
369 pi+			211	1	64	-1	-1	-1	0.200	0.234	5.845	5.855
370 pi0			111	2	64	-1	128	129	0.027	-0.486	5.088	5.113
371 gamma			22	1	65	-1	-1	-1	-0.096	-0.060	-0.245	0.270
372 e-			11	1	65	-1	-1	-1	-0.230	-0.140	-0.339	0.433
373 e+			-11	1	65	-1	-1	-1	-0.425	-0.262	-0.640	0.812
374 gamma			22	1	67	-1	-1	-1	0.015	-0.029	-9.189	9.189
-0.011	0.011											
375 gamma			22	1	67	-1	-1	-1	-0.093	-0.396	-46.018	46.020
-0.011	0.011											
376 pi0			111	2	68	-1	130	131	0.040	-0.168	-35.719	35.720
377 pi0			111	2	68	-1	132	133	-0.104	-0.112	-32.163	32.164
378 eta			221	2	68	-1	134	136	-0.002	0.015	-139.082	139.083
379 gamma			22	1	73	-1	-1	-1	0.221	0.276	0.699	0.784
380 gamma			22	1	73	-1	-1	-1	0.018	0.140	0.204	0.248
381 gamma			22	1	77	-1	-1	-1	-0.019	-0.166	-0.157	0.229

382	gamma		22	1	77	-1	-1	-1	0.097	-0.092	-0.101	0.167
383	gamma		22	1	81	-1	-1	-1	0.219	-0.330	0.175	0.433
384	gamma		22	1	81	-1	-1	-1	0.190	-0.513	0.139	0.565
385	gamma		22	1	85	-1	-1	-1	-0.076	-0.097	-0.046	0.131
386	gamma		22	1	85	-1	-1	-1	-0.160	-0.124	0.089	0.222
387	pi0		111	2	94	-1	137	138	-0.244	-0.148	-24.415	24.417
388	pi0		111	2	94	-1	139	140	0.007	0.056	-11.721	11.722
389	pi0		111	2	94	-1	141	142	0.013	-0.034	-13.693	13.694
390	gamma		22	1	96	-1	-1	-1	0.230	0.083	153.184	153.184
0.094	0.094											
391	gamma		22	1	96	-1	-1	-1	0.042	-0.045	43.187	43.187
0.094	0.094											
392	gamma		22	1	102	-1	-1	-1	0.088	-0.185	6.393	6.396
-	0.006	0.006										
393	gamma		22	1	102	-1	-1	-1	0.016	-0.394	9.540	9.548
-	0.006	0.006										
394	gamma		22	1	104	-1	-1	-1	-0.027	-0.410	4.026	4.047
-	0.002	0.002										
395	gamma		22	1	104	-1	-1	-1	0.054	-0.075	1.062	1.066
-	0.002	0.002										
396	gamma		22	1	110	-1	-1	-1	-0.034	-0.011	-11.219	11.219
-	-0.001	0.001										
397	gamma		22	1	110	-1	-1	-1	0.074	-0.157	-24.499	24.500
-	-0.001	0.001										
398	gamma		22	1	111	-1	-1	-1	-0.079	-0.046	-7.652	7.652
-	-0.014	0.014										
399	gamma		22	1	111	-1	-1	-1	-0.025	-0.065	-24.511	24.512
-	-0.014	0.014										
400	pi-		-211	1	112	-1	-1	-1	0.015	0.062	-61.301	61.302
401	pi+		211	1	112	-1	-1	-1	0.098	-0.074	-32.571	32.572
402	pi0		111	2	112	-1	143	144	-0.115	0.027	-45.209	45.209
403	gamma		22	1	121	-1	-1	-1	0.002	0.013	-2.921	2.921
-	-0.018	0.018										
404	gamma		22	1	121	-1	-1	-1	-0.246	-0.162	-21.494	21.496
-	-0.018	0.018										
405	gamma		22	1	122	-1	-1	-1	-0.028	0.092	-7.871	7.871
-	0.001	0.001										
406	gamma		22	1	122	-1	-1	-1	0.035	-0.036	-3.850	3.851
-	0.001	0.001										
407	gamma		22	1	123	-1	-1	-1	0.039	0.007	-1.245	1.246
-												
408	gamma		22	1	123	-1	-1	-1	-0.026	-0.041	-12.448	12.448
-												
409	gamma		22	1	136	-1	-1	-1	-0.008	0.029	-2.029	2.030
-	-0.025	0.025										
410	gamma		22	1	136	-1	-1	-1	-0.107	-0.002	-43.180	43.180
-	-0.025	0.025										
----- interaction 3 -----												
411	proton		2212	3		-1	-1	-1		980	980	
412	antiproton		-2212	3		-1	-1	-1		-980	980	
413	*** unknown ***		9902210	3		0	-1	-1	-1	-0.623	-0.016	979.996 979.998
414	*** unknown ***		-9902210	3		1	-1	-1	-1	0.623	0.016	-979.996

980.002												
415 ud_0		2101	2	2	-1	8	8	-0.605	-0.015	951.726	951.727	
416 u		2	2	2	-1	8	8	-0.018	-	28.270	28.272	
417 uu_1_bar		-2203	2	3	-1	11	11	0.616	0.016	-969.083	969.084	
418 d_bar		-1	2	3	-1	11	11	0.007	-10.913	10.918		
419 string		92	2	4	5	9	10	-0.623	-0.016	979.996	979.998	
420 pi0		111	2	8	-1	16	17	-0.478	0.133	762.926	762.926	
421 proton		2212	1	8	-1	-1	-1	-0.145	-0.149	217.070	217.072	
422 string		92	2	6	7	12	15	0.623	0.016	-979.996	980.002	
423 rho-		-213	2	11	-1	18	19	0.610	-0.454	-237.740	237.743	
424 antiproton		-2212	1	11	-1	-1	-1	-0.462	0.187	-244.374	244.376	
425 pi+		211	1	11	-1	-1	-1	0.379	0.117	-390.184	390.185	
426 pi0		111	2	11	-1	20	21	0.095	0.165	-107.698	107.698	
427 gamma		22	1	9	-1	-1	-1	-0.076	-0.001	64.961	64.961	
- 0.513 0.513												
428 gamma		22	1	9	-1	-1	-1	-0.401	0.134	697.965	697.965	
- 0.513 0.513												
429 pi-		-211	1	12	-1	-1	-1	0.369	-0.087	-191.545	191.545	
-												
430 pi0		111	2	12	-1	22	23	0.241	-0.366	-46.196	46.198	
-												
431 gamma		22	1	15	-1	-1	-1	0.061	0.110	-35.629	35.629	
-0.005 0.005												
432 gamma		22	1	15	-1	-1	-1	0.033	0.054	-72.069	72.069	
-0.005 0.005												
433 gamma		22	1	19	-1	-1	-1	0.056	-0.134	-21.583	21.584	
- -0.009 0.009												
434 gamma		22	1	19	-1	-1	-1	0.185	-0.232	-24.612	24.614	
- -0.009 0.009												
----- interaction 4 -----												
435 proton		2212	3	-1	-1	-1	-1		98 98			
436 antiproton		-2212	3	-1	-1	-1	-1		-98 98			
437 *** unknown ***		9902210	3	0	-1	-1	-1	-0.031	-0.094	979.995	980.004	
438 antiproton		-2212	3	1	-1	-1	-1	0.031	0.094	-979.995	979.996	
439 uu_1		2203	2	2	-1	8	8	-0.029	-0.088	918.944	918.944	
440 g		21	2	2	-1	8	8		-0.004	0.004		
441 d		1	2	2	-1	8	8	-0.002	-0.006	61.055	61.056	
442 antiproton		-2212	1	3	-1	-1	-1	0.031	0.094	-979.995	979.996	
443 string		92	2	4	6	9	11	-0.031	-0.094	979.995	980.004	
444 Delta+		2214	2	8	-1	12	13	-0.130	-0.021	858.860	858.861	
445 pi+		211	1	8	-1	-1	-1	-0.114	-0.347	111.095	111.095	
446 pi-		-211	1	8	-1	-1	-1	0.212	0.274	10.041	10.048	

447	proton		2212	1	9	-1	-1	-1	-0.378	-0.002	727.676	727.677
448	pi0		111	2	9	-1	14	15	0.249	-0.019	131.184	131.184
449	gamma		22	1	13	-1	-1	-1	-0.007	0.010	1.361	1.361
-	0.001	0.001										
450	gamma		22	1	13	-1	-1	-1	0.256	-0.029	129.822	129.823
-	0.001	0.001										

////////////////////////////////////  
 \*\*\* Run,Event: 271791,2567      Rs:      2 :    >>> TStnAna: Processed      42500 events

----- interaction 0 -----												
i	name	PDG	SC	FM	SM	FD	SD	px	py	pz	e	
0	proton	2212	3	-1	-1	-1	-1	980	980			
1	antiproton	-2212	3	-1	-1	-1	-1	-980	980			
2	u	2	3	0	-1	-1	-1	1.914	1.157	112.598	112.620	
3	d_bar	-1	3	1	-1	-1	-1	3.211	-0.646	-38.699	38.837	
4	u	2	3	2	-1	-1	-1	1.583	-5.426	36.015	36.455	
5	d_bar	-1	3	3	-1	-1	-1	2.838	-0.571	-34.208	34.330	
6	w+	24	3	4	5	-1	-1	4.421	-5.997	1.807	70.785	
7	e+	-11	3	6	-1	-1	-1	-29.600	-14.015	-9.412	34.076	
8	nu_e	12	3	6	-1	-1	-1	34.021	8.017	11.219	36.710	
9	w+	24	2	6	-1	10	12	4.421	-5.997	1.807	70.785	
10	nu_e	12	1	8	-1	-1	-1	34.021	8.017	11.219	36.710	
11	e+	-11	1	7	-1	-1	-1	-28.933	-13.705	-9.191	33.308	
12	gamma	22	1	7	-1	-1	-1	-0.667	-0.309	-0.221	0.768	
13	s_bar	-3	2	2	-1	25	25	-2.991	11.073	14.698	18.650	
14	g	21	2	2	-1	25	25	-0.078	2.688	6.245	6.799	
15	uu_1_bar	-2203	2	1	-1	25	25	-3.211	0.646	-941.216	941.222	
16	s	3	2	2	-1	41	41	1.188	-1.673	2.907	3.593	
17	g	21	2	2	-1	41	41	-1.347	-3.780	4.431	5.978	
18	g	21	2	2	-1	41	41	-0.041	-0.269	0.607	0.665	
19	g	21	2	2	-1	41	41	2.564	-1.303	1.673	3.327	
20	g	21	2	2	-1	41	41	0.116	0.579	6.122	6.150	
21	g	21	2	2	-1	41	41	0.364	-0.755	16.966	16.986	
22	g	21	2	2	-1	41	41	1.266	0.206	14.181	14.239	
23	g	21	2	2	-1	41	41	-0.339	-0.259	4.262	4.283	
24	ud_0	2101	2	0	-1	41	41	-1.914	-1.157	867.317	867.320	
25	string	92	2	13	15	26	40	-6.279	14.407	-920.273	966.672	



26	$\kappa^0$	313	2	25	-1	57	58	-1.047	3.827	5.021	6.448
27	$\pi^+$	211	1	25	-1	-1	-1	-0.667	3.245	5.497	6.419
28	$\kappa^*$	-323	2	25	-1	59	60	-1.240	6.846	8.962	11.389
29	$\kappa^0$	313	2	25	-1	61	62	0.040	-0.427	0.328	1.032
30	$\pi^+$	211	1	25	-1	-1	-1	-0.012	0.179	-0.056	0.234
31	$\pi^-$	-211	1	25	-1	-1	-1	0.118	-0.055	-0.117	0.224
32	$\rho^+$	213	2	25	-1	63	64	-0.585	-0.250	-0.227	0.855
33	$\omega$	223	2	25	-1	65	67	0.008	0.442	-2.906	3.042
34	$\pi^-$	-211	1	25	-1	-1	-1	0.370	0.003	-3.922	3.942
35	$\pi^+$	211	1	25	-1	-1	-1	0.183	-0.214	-0.805	0.864
36	$\rho^0$	113	2	25	-1	68	69	-0.607	0.120	-4.873	4.993
37	$\kappa^-$	-321	1	25	-1	-1	-1	0.296	0.106	-24.968	24.975
38	$\kappa^0$	313	2	25	-1	70	71	0.467	0.050	-15.209	15.245
39	$\Delta^0_{\text{bar}}$	-2114	2	25	-1	72	73	-1.943	0.361	-282.868	282.877
40	$\pi^-$	-211	1	25	-1	-1	-1	-1.660	0.172	-604.130	604.132
41	string	92	2	16	24	42	56	1.858	-8.410	918.466	922.543
42	$\kappa^*$	-323	2	41	-1	74	75	0.518	-1.748	2.618	3.310
43	$\kappa^*$	323	2	41	-1	76	77	-0.265	-1.621	2.100	2.813
44	$\kappa^-$	-321	1	41	-1	-1	-1	1.454	-1.039	2.243	2.910
45	$\Delta^0$	2114	2	41	-1	78	79	-0.335	-1.008	1.194	1.998
46	$\pi^0$	111	2	41	-1	80	81	-0.347	-0.555	1.188	1.363
47	$\Delta^0_{\text{bar}}$	-2114	2	41	-1	82	83	1.191	-0.547	1.497	2.332
48	$\pi^0$	111	2	41	-1	84	85	0.144	-0.325	2.401	2.431
49	$\pi^+$	211	1	41	-1	-1	-1	0.812	0.099	9.516	9.552
50	$\kappa^0$	313	2	41	-1	86	87	-0.164	-0.500	15.326	15.363
51	$\phi$	333	2	41	-1	88	89	0.270	0.140	10.914	10.966
52	$\kappa^-$	-321	1	41	-1	-1	-1	0.215	-0.153	16.627	16.636
53	$\rho^+$	213	2	41	-1	90	91	0.342	0.115	30.443	30.456
54	$\eta$	221	2	41	-1	92	93	-0.345	0.017	24.709	24.718
55	$\rho^0$	113	2	41	-1	94	95	-0.250	-0.363	173.929	173.932
56	neutron	2112	1	41	-1	-1	-1	-1.381	-0.922	623.761	623.764
57	$\kappa^+$	321	1	26	-1	-1	-1	-0.554	1.808	2.246	2.977

58	pi-	-211	1	26	-1	-1	-1	-0.494	2.020	2.775	3.470	
59	k-	-321	1	28	-1	-1	-1	-0.780	5.522	7.495	9.355	
60	pi0	111	2	28	-1	96	97	-0.460	1.324	1.467	2.034	
61	k+	321	1	29	-1	-1	-1	0.215	-0.100	0.322	0.635	
62	pi-	-211	1	29	-1	-1	-1	-0.175	-0.328	0.006	0.397	
63	pi+	211	1	32	-1	-1	-1	-0.445	-0.144	0.061	0.492	
64	pi0	111	2	32	-1	98	99	-0.140	-0.106	-0.288	0.363	
65	pi-	-211	1	33	-1	-1	-1	-0.134	0.104	-0.440	0.492	
66	pi+	211	1	33	-1	-1	-1	0.117	0.199	-0.450	0.525	
67	pi0	111	2	33	-1	100	101	0.025	0.139	-2.015	2.025	
68	pi-	-211	1	36	-1	-1	-1	-0.622	-0.232	-2.488	2.579	
69	pi+	211	1	36	-1	-1	-1	0.016	0.352	-2.384	2.414	
70	k0	311	2	38	-1	102	102	0.058	-0.199	-6.787	6.809	
71	pi0	111	2	38	-1	103	104	0.409	0.249	-8.422	8.437	
72	antiproton	-2212	1	39	-1	-1	-1	-1.434	0.157	-203.910	203.917	
73	pi+	211	1	39	-1	-1	-1	-0.509	0.204	-78.958	78.960	
74	k0_bar	-311	2	42	-1	105	105	0.190	-0.647	0.824	1.175	
75	pi-	-211	1	42	-1	-1	-1	0.328	-1.101	1.794	2.135	
76	k0	311	2	43	-1	106	106	-0.276	-0.554	0.938	1.229	
77	pi+	211	1	43	-1	-1	-1	0.010	-1.067	1.162	1.584	
78	neutron	2112	1	45	-1	-1	-1	-0.381	-0.754	0.760	1.475	
79	pi0	111	2	45	-1	107	108	0.046	-0.254	0.434	0.523	
80	gamma	22	1	46	-1	-1	-1	-0.209	-0.274	0.500	0.608	
-	81	gamma	22	1	46	-1	-1	-1	-0.138	-0.280	0.688	0.755
-	82	antiproton	-2212	1	47	-1	-1	-1	0.746	-0.318	0.856	1.507
83	pi+	211	1	47	-1	-1	-1	0.445	-0.229	0.640	0.824	
84	gamma	22	1	48	-1	-1	-1	0.001	-0.031	0.063	0.070	
-	0.001	0.001										
-	85	gamma	22	1	48	-1	-1	-1	0.143	-0.294	2.338	2.360
-	0.001	0.001										
86	k0	311	2	50	-1	109	109	0.157	-0.113	8.567	8.584	
87	pi0	111	2	50	-1	110	111	-0.321	-0.387	6.759	6.779	
88	k_L0	130	1	51	-1	-1	-1	0.134	0.176	5.810	5.836	
89	k_S0	310	1	51	-1	-1	-1	0.136	-0.036	5.104	5.130	

90 pi+	211	1	53	-1	-1	-1	-0.054	0.187	23.128	23.129
91 pi0	111	2	53	-1	112	113	0.396	-0.072	7.315	7.327
92 gamma	22	1	54	-1	-1	-1	0.021	0.065	16.551	16.551
93 gamma	22	1	54	-1	-1	-1	-0.366	-0.048	8.158	8.166
94 pi-	-211	1	55	-1	-1	-1	0.005	0.192	83.116	83.117
95 pi+	211	1	55	-1	-1	-1	-0.254	-0.556	90.813	90.815
96 gamma	22	1	60	-1	-1	-1	-0.359	1.162	1.291	1.774
97 gamma	22	1	60	-1	-1	-1	-0.102	0.163	0.176	0.260
98 gamma	22	1	64	-1	-1	-1	0.008	0.001	-0.104	0.104
99 gamma	22	1	64	-1	-1	-1	-0.148	-0.107	-0.184	0.259
100 gamma	22	1	67	-1	-1	-1	-0.040	0.118	-1.458	1.463
-0.001 0.001	22	1	67	-1	-1	-1	0.065	0.021	-0.558	0.562
101 gamma	22	1	67	-1	-1	-1	0.065	0.021	-0.558	0.562
-0.001 0.001	130	1	70	-1	-1	-1	0.058	-0.199	-6.787	6.809
102 K_L0	130	1	70	-1	-1	-1	0.058	-0.199	-6.787	6.809
103 gamma	22	1	71	-1	-1	-1	0.003	0.040	-0.580	0.581
-0.004 0.004	22	1	71	-1	-1	-1	0.407	0.209	-7.842	7.855
104 gamma	22	1	71	-1	-1	-1	0.407	0.209	-7.842	7.855
-0.004 0.004	130	1	74	-1	-1	-1	0.190	-0.647	0.824	1.175
105 K_L0	130	1	74	-1	-1	-1	0.190	-0.647	0.824	1.175
106 K_L0	130	1	76	-1	-1	-1	-0.276	-0.554	0.938	1.229
107 gamma	22	1	79	-1	-1	-1	0.039	-0.238	0.442	0.503
108 gamma	22	1	79	-1	-1	-1	0.008	-0.017	-0.008	0.020
109 K_L0	130	1	86	-1	-1	-1	0.157	-0.113	8.567	8.584
110 gamma	22	1	87	-1	-1	-1	-0.301	-0.323	5.254	5.272
- 0.002 0.002	22	1	87	-1	-1	-1	-0.020	-0.064	1.505	1.507
111 gamma	22	1	87	-1	-1	-1	-0.020	-0.064	1.505	1.507
- 0.002 0.002	22	1	91	-1	-1	-1	0.314	-0.112	5.806	5.815
112 gamma	22	1	91	-1	-1	-1	0.314	-0.112	5.806	5.815
113 gamma	22	1	91	-1	-1	-1	0.083	0.040	1.509	1.512
----- interaction 1 -----										
114 proton	2212	3	-1	-1	-1	-1		98 98		
115 antiproton	-2212	3	-1	-1	-1	-1		-98 98		
116 g	21	3	0	-1	-1	-1	0.919	-1.045	6.769	6.910
117 g	21	3	1	-1	-1	-1	-0.828	1.355	-62.806	62.826
118 g	21	3	2	-1	-1	-1	0.726	0.206	0.918	1.188
119 g	21	3	3	-1	-1	-1	-0.769	1.259	-58.365	58.383
120 g	21	3	4	5	-1	-1	3.870	-0.794	-3.060	4.997
121 g	21	3	4	5	-1	-1	-3.913	2.259	-54.387	54.574

122 ud_1	2103	2	0	-1	23	23	-0.258	0.316	738.306	738.307
123 g	21	2	2	-1	23	23	0.108	-0.130	4.103	4.106
124 g	21	2	2	-1	23	23	-0.181	0.539	0.506	0.761
125 g	21	2	2	-1	23	23	-0.646	0.704	0.023	
0.955 126 g	21	2	2	-1	23	23	-0.400	-0.795	-1.015	1.350
127 g	21	2	2	-1	23	23	0.638	-1.073	-1.092	1.659
128 g	21	2	2	-1	23	23	0.615	-0.399	-1.115	1.334
129 ud_0_bar	-2101	2	1	-1	23	23	0.617	-0.610	-786.573	786.574
130 u	2	2	0	-1	43	43	-0.661	0.729	234.841	234.843
131 g	21	2	6	-1	43	43	2.490	0.520	-2.866	3.832
132 g	21	2	6	-1	43	43	0.978	-1.201	-1.066	1.880
133 g	21	2	7	-1	43	43	-1.470	2.312	-14.689	14.943
134 g	21	2	7	-1	43	43	-1.472	-0.696	-32.896	32.936
135 g	21	2	7	-1	43	43	-0.568	0.530	-5.930	5.981
136 u_bar	-2	2	1	-1	43	43	0.211	-0.745	-130.537	130.540
137 string	92	2	8	15	24	42	0.493	-1.448	-46.857	1535.045
138 Delta+	2214	2	23	-1	63	64	-0.321	-0.470	420.769	420.771
139 rho-	-213	2	23	-1	65	66	-0.041	0.114	256.211	256.212
140 pi+	211	1	23	-1	-1	-1	0.389	0.578	19.672	19.685
141 kappa-	-321	1	23	-1	-1	-1	-0.379	0.128	18.777	18.788
142 eta'	331	2	23	-1	67	68	0.439	0.211	16.908	16.942
143 kappa*0	313	2	23	-1	69	70	-0.638	-0.280	7.738	7.819
144 rho+	213	2	23	-1	71	72	-0.049	0.871	1.070	1.568
145 rho0	113	2	23	-1	73	74	0.034	-0.089	0.722	0.939
146 rho-	-213	2	23	-1	75	76	0.070	-0.640	-0.350	1.115
147 omega	223	2	23	-1	77	79	-0.065	-0.016	0.492	0.925
148 rho+	213	2	23	-1	80	81	-0.252	0.027	-0.314	0.883
149 rho-	-213	2	23	-1	82	83	0.114	-0.347	-0.525	0.960
150 rho+	213	2	23	-1	84	85	0.268	-0.733	-2.884	3.107
151 rho0	113	2	23	-1	86	87	-0.037	0.177	-5.259	5.321
152 kappa*-	-323	2	23	-1	88	89	0.099	-0.538	-5.728	5.821
153 kappa*+	323	2	23	-1	90	91	0.429	0.707	-41.880	41.898

154 rho0	113	2	23	-1	92	93	-0.117	-0.592	-47.853	47.865
155 Delta--	-2224	2	23	-1	94	95	0.356	-0.490	-310.279	310.283
156 rho+	213	2	23	-1	96	97	0.193	-0.067	-374.143	374.144
157 string	92	2	16	22	44	62	-0.493	1.448	46.857	424.955
158 rho+	213	2	43	-1	98	99	-0.235	0.307	114.119	114.122
159 rho-	-213	2	43	-1	100	101	-0.361	0.300	39.142	39.151
160 rho0	113	2	43	-1	102	103	0.087	0.062	27.550	27.558
161 omega	223	2	43	-1	104	106	-0.170	-0.026	14.083	14.106
162 pi+	211	1	43	-1	-1	-1	-0.077	0.123	21.972	21.973
163 K0	311	2	43	-1	107	107	-0.288	-0.043	3.915	3.957
164 K*-	-323	2	43	-1	108	109	0.715	0.182	12.685	12.742
165 K*+	323	2	43	-1	110	111	0.063	-0.730	0.656	1.235
166 K-	-321	1	43	-1	-1	-1	0.806	0.925	-0.300	1.356
167 pi0	111	2	43	-1	112	113	0.102	-0.722	-0.772	1.071
168 K*+	323	2	43	-1	114	115	1.962	-0.131	-2.157	3.044
169 K-	-321	1	43	-1	-1	-1	-0.231	0.061	-1.845	1.924
170 K*+	323	2	43	-1	116	117	-0.112	0.232	-1.997	2.213
171 Sigma*-	3114	2	43	-1	118	119	-0.408	0.538	-10.583	10.693
172 eta	221	2	43	-1	120	121	-0.974	0.940	-13.028	13.109
173 Delta0_bar	-2114	2	43	-1	122	123	-0.728	0.100	-15.596	15.666
174 rho+	213	2	43	-1	124	125	-0.440	-0.259	-46.048	46.055
175 rho0	113	2	43	-1	126	127	-0.469	-0.428	-16.131	16.166
176 rho-	-213	2	43	-1	128	129	0.264	0.020	-78.808	78.813
177 proton	2212	1	24	-1	-1	-1	-0.296	-0.560	397.867	397.869
178 pi0	111	2	24	-1	130	131	-0.025	0.091	22.902	22.903
179 pi-	-211	1	25	-1	-1	-1	-0.366	0.141	116.755	116.755
180 pi0	111	2	25	-1	132	133	0.325	-0.027	139.456	139.456
181 gamma	22	1	28	-1	-1	-1	0.093	0.179	1.935	1.946
182 rho0	113	2	28	-1	134	135	0.347	0.032	14.973	14.997
183 K0	311	2	29	-1	136	136	-0.521	-0.020	6.532	6.571
184 pi0	111	2	29	-1	137	138	-0.117	-0.259	1.207	1.247
185 pi+	211	1	30	-1	-1	-1	0.297	0.306	0.580	0.733

186 pi0	111	2	30	-1	139	140	-0.346	0.564	0.490	0.834
187 pi+	211	1	31	-1	-1	-1	0.119	-0.064	0.747	0.772
188 pi-	-211	1	31	-1	-1	-1	-0.085	-0.025	-0.025	0.167
189 pi-	-211	1	32	-1	-1	-1	-0.265	-0.630	-0.256	0.743
190 pi0	111	2	32	-1	141	142	0.334	-0.010	-0.094	0.373
191 pi+	211	1	33	-1	-1	-1	0.220	-0.138	0.227	0.372
192 pi-	-211	1	33	-1	-1	-1	-0.269	0.081	0.265	0.411
193 pi0	111	2	33	-1	143	144	-0.016	0.041	0.142	
194 pi+	211	1	34	-1	-1	-1	-0.358	-0.231	-0.353	0.571
195 pi0	111	2	34	-1	145	146	0.106	0.258	0.040	0.312
196 pi-	-211	1	35	-1	-1	-1	0.085	0.054	0.104	0.201
197 pi0	111	2	35	-1	147	148	0.029	-0.401	-0.629	0.759
198 pi+	211	1	36	-1	-1	-1	-0.006	0.003	-1.531	1.537
199 pi0	111	2	36	-1	149	150	0.274	-0.736	-1.353	1.570
200 pi-	-211	1	37	-1	-1	-1	0.313	-0.010	-3.305	
201 pi+	211	1	37	-1	-1	-1	-0.350	0.186	-1.954	1.998
202 K0_bar	-311	2	38	-1	151	151	0.301	-0.476	-3.615	3.693
203 pi-	-211	1	38	-1	-1	-1	-0.202	-0.062	-2.113	2.128
204 K0	311	2	39	-1	152	152	0.385	0.253	-17.364	17.377
205 pi+	211	1	39	-1	-1	-1	0.045	0.454	-24.517	24.521
206 pi+	211	1	40	-1	-1	-1	-0.003	-0.562	-15.552	15.563
207 pi-	-211	1	40	-1	-1	-1	-0.115	-0.030	-32.301	32.302
208 antiproton	-2212	1	41	-1	-1	-1	0.393	-0.626	-249.616	249.619
209 pi-	-211	1	41	-1	-1	-1	-0.037	0.137	-60.663	60.663
210 pi+	211	1	42	-1	-1	-1	0.053	0.303	-244.309	244.309
211 pi0	111	2	42	-1	153	154	0.140	-0.370	-129.835	129.835
212 pi+	211	1	44	-1	-1	-1	-0.248	0.128	105.051	105.052
213 pi0	111	2	44	-1	155	156	0.014	0.180	9.067	9.070
214 pi-	-211	1	45	-1	-1	-1	0.068	-0.145	10.840	10.842
215 pi0	111	2	45	-1	157	158	-0.429	0.445	28.302	28.309
216 pi-	-211	1	46	-1	-1	-1	0.146	0.051	26.081	26.082
217 pi+	211	1	46	-1	-1	-1	-0.059	0.010	1.468	1.476

218 pi+	211	1	47	-1	-1	-1	-0.009	-0.148	1.918	1.929
219 pi-	-211	1	47	-1	-1	-1	-0.013	0.079	1.258	1.268
220 pi0	111	2	47	-1	159	160	-0.148	0.042	10.907	10.909
221 K_L0	130	1	49	-1	-1	-1	-0.288	-0.043	3.915	3.957
222 K0_bar	-311	2	50	-1	161	161	0.161	0.285	5.027	5.062
223 pi-	-211	1	50	-1	-1	-1	0.555	-0.103	7.658	7.680
224 K0	311	2	51	-1	162	162	-0.077	-0.347	0.435	0.751
225 pi+	211	1	51	-1	-1	-1	0.140	-0.383	0.221	0.485
226 gamma	22	1	53	-1	-1	-1	-0.003	-0.355	-0.311	0.472
227 gamma	22	1	53	-1	-1	-1	0.105	-0.367	-0.461	0.599
228 K+	321	1	54	-1	-1	-1	1.083	-0.328	-1.315	1.804
229 pi0	111	2	54	-1	163	164	0.878	0.197	-0.842	1.240
230 K0	311	2	56	-1	165	165	-0.241	0.018	-1.750	1.835
231 pi+	211	1	56	-1	-1	-1	0.129	0.214	-0.247	0.378
232 Lambda0	3122	1	57	-1	-1	-1	-0.233	0.593	-9.385	9.473
233 pi-	-211	1	57	-1	-1	-1	-0.175	-0.055	-1.198	1.220
234 gamma	22	1	58	-1	-1	-1	-0.608	0.898	-10.261	10.318
235 gamma	22	1	58	-1	-1	-1	-0.366	0.042	-2.767	2.791
236 antiproton	-2212	1	59	-1	-1	-1	-0.739	0.161	-15.063	15.111
237 pi+	211	1	59	-1	-1	-1	0.011	-0.061	-0.533	0.555
238 pi+	211	1	60	-1	-1	-1	-0.344	-0.044	-39.277	39.278
239 pi0	111	2	60	-1	166	167	-0.097	-0.215	-6.772	6.777
240 pi-	-211	1	61	-1	-1	-1	-0.255	0.213	-5.277	5.290
241 pi+	211	1	61	-1	-1	-1	-0.214	-0.642	-10.854	10.876
242 pi-	-211	1	62	-1	-1	-1	0.261	0.157	-74.265	74.265
243 pi0	111	2	62	-1	168	169	0.003	-0.138	-4.543	4.547
244 gamma	22	1	64	-1	-1	-1	0.037	-0.016	6.524	6.524
- 0.004 0.004										
245 gamma	22	1	64	-1	-1	-1	-0.062	0.107	16.378	16.379
- 0.004 0.004										
246 gamma	22	1	66	-1	-1	-1	0.175	0.002	99.635	99.636
- 0.070 0.070										
247 gamma	22	1	66	-1	-1	-1	0.150	-0.029	39.821	39.821
- 0.070 0.070										
248 pi-	-211	1	68	-1	-1	-1	0.470	0.211	7.409	7.429
249 pi+	211	1	68	-1	-1	-1	-0.123	-0.180	7.564	7.568

250	K_S0		310	1	69	-1	-1	-1	-0.521	-0.020	6.532	6.571
251	gamma		22	1	70	-1	-1	-1	0.025	-0.087	0.300	0.313
252	gamma		22	1	70	-1	-1	-1	-0.142	-0.173	0.907	0.934
253	gamma		22	1	72	-1	-1	-1	-0.321	0.483	0.372	0.689
254	gamma		22	1	72	-1	-1	-1	-0.024	0.082	0.118	0.145
255	gamma		22	1	76	-1	-1	-1	0.046	0.048	-0.023	0.071
256	gamma		22	1	76	-1	-1	-1	0.288	-0.058	-0.070	0.302
257	gamma		22	1	79	-1	-1	-1	0.040	-0.015	-0.035	0.055
258	gamma		22	1	79	-1	-1	-1	-0.055	0.056	0.036	0.087
259	gamma		22	1	81	-1	-1	-1	0.138	0.221	0.040	0.264
260	gamma		22	1	81	-1	-1	-1	-0.032	0.037	-0.049	
261	gamma		22	1	83	-1	-1	-1	0.074	-0.274	-0.366	0.463
262	gamma		22	1	83	-1	-1	-1	-0.045	-0.127	-0.263	0.296
263	gamma		22	1	85	-1	-1	-1	0.077	-0.294	-0.641	0.709
264	gamma	0.001	22	1	85	-1	-1	-1	0.196	-0.442	-0.712	0.860
265	K_S0	0.001	310	1	88	-1	-1	-1	0.301	-0.476	-3.615	3.693
266	K_S0		310	1	90	-1	-1	-1	0.385	0.253	-17.364	17.377
267	gamma		22	1	97	-1	-1	-1	0.143	-0.205	-69.777	69.777
268	gamma	0.001	22	1	97	-1	-1	-1	-0.002	-0.165	-60.058	60.058
269	gamma	0.001	22	1	99	-1	-1	-1	0.060	0.136	4.703	4.705
270	gamma		22	1	99	-1	-1	-1	-0.046	0.044	4.365	4.365
271	gamma		22	1	101	-1	-1	-1	-0.286	0.201	16.042	16.046
272	gamma	0.006	22	1	101	-1	-1	-1	-0.143	0.244	12.260	12.263
273	gamma	0.006	22	1	106	-1	-1	-1	-0.103	0.020	9.999	9.999
274	gamma	0.001	22	1	106	-1	-1	-1	-0.045	0.022	0.908	0.909
275	K_L0	0.001	130	1	108	-1	-1	-1	0.161	0.285	5.027	
276	K_S0	5.062	310	1	110	-1	-1	-1	-0.077	-0.347	0.435	0.751
277	gamma		22	1	115	-1	-1	-1	0.535	0.093	-0.588	0.801
278	gamma		22	1	115	-1	-1	-1	0.343	0.104	-0.253	0.439
279	K_L0		130	1	116	-1	-1	-1	-0.241	0.018	-1.750	1.835
280	gamma		22	1	125	-1	-1	-1	-0.015	-0.039	-3.148	3.148
281	gamma		22	1	125	-1	-1	-1	-0.081	-0.176	-3.624	3.629



282	gamma		22	1	129	-1	-1	-1	-0.026	-0.156	-3.831	3.834
-	-0.001	0.001										
283	gamma		22	1	129	-1	-1	-1	0.029	0.019	-0.712	0.713
-	-0.001	0.001										
			----- interaction 2 -----									
284	proton		2212	3		-1	-1	-1		<sup>98</sup>	<sup>98</sup>	
285	antiproton		-2212	3		-1	-1	-1		<sup>-98</sup>	<sup>98</sup>	
286	proton		2212	3		0	-1	-1	-0.210	0.212	979.977	979.977
287	*** unknown ***		-9902210	3		1	-1	-1	0.210	-0.212	-979.977	
980.023												
288	proton		2212	1	2	-1	-1	-1	-0.210	0.212	979.977	979.977
289	ud_1_bar		-2103	2	3	-1	8	8	0.135	-0.136	-630.121	630.122
290	g		21	2	3	-1	8	8	-	0.022	0.022	
291	u_bar		-2	2	3	-1	8	8	0.075	-0.076	-349.878	349.878
292	string		92	2	5	7	9	15	0.210	-0.212	-979.977	980.023
293	pi-		-211	1	8	-1	-1	-1	-0.048	0.036	-71.822	71.823
294	Delta0_bar		-2114	2	8	-1	16	17	0.607	-0.943	-331.027	331.031
295	rho0		113	2	8	-1	18	19	0.140	1.167	-68.931	68.946
296	eta		221	2	8	-1	20	22	-0.609	-0.839	-165.553	165.557
297	eta		221	2	8	-1	23	25	0.088	0.595	-19.727	19.744
298	pi+		211	1	8	-1	-1	-1	-0.027	-0.360	-13.305	13.310
299	pi-		-211	1	8	-1	-1	-1	0.058	0.132	-309.611	309.611
300	antiproton		-2212	1	10	-1	-1	-1	0.446	-0.963	-287.972	287.975
301	pi+		211	1	10	-1	-1	-1	0.161	0.020	-43.055	43.056
302	pi-		-211	1	11	-1	-1	-1	0.458	0.707	-40.712	40.721
303	pi+		211	1	11	-1	-1	-1	-0.317	0.459	-28.219	28.225
304	pi0		111	2	12	-1	26	27	-0.123	-0.265	-52.530	52.531
305	pi0		111	2	12	-1	28	29	-0.402	-0.434	-69.386	69.389
306	pi0		111	2	12	-1	30	31	-0.084	-0.140	-43.636	43.637
307	pi+		211	1	13	-1	-1	-1	-0.051	0.024	-3.060	3.063
308	pi-		-211	1	13	-1	-1	-1	0.080	0.334	-10.907	10.913
309	pi0		111	2	13	-1	32	33	0.058	0.238	-5.761	5.767
310	gamma		22	1	20	-1	-1	-1	-0.012	-0.024	-1.185	1.185
-	-0.011	0.011										
311	gamma		22	1	20	-1	-1	-1	-0.111	-0.242	-51.346	51.347
-	-0.011	0.011										
312	gamma		22	1	21	-1	-1	-1	-0.102	-0.077	-21.576	21.576
-	-0.018	0.018										
313	gamma		22	1	21	-1	-1	-1	-0.300	-0.357	-47.810	47.812
-	-0.018	0.018										
314	gamma		22	1	22	-1	-1	-1	-0.083	-0.062	-12.876	12.876

315	gamma	-0.004	0.004	22	1	22	-1	-1	-1	-0.001	-0.079	-30.760	30.760	
316	gamma	-0.004	0.004	22	1	25	-1	-1	-1	-0.018	-0.010	-0.319	0.319	
317	gamma			22	1	25	-1	-1	-1	0.076	0.247	-5.442	5.448	
----- interaction 3 -----														
318	proton			2212	3		-1	-1	-1		<sup>98</sup>	<sup>98</sup>		
319	antiproton			-2212	3		-1	-1	-1		<sup>-98</sup>	<sup>98</sup>		
320	g			21	3		0	-1	-1	0.325	-0.873	40.003	40.014	
321	g			21	3		1	-1	-1	1.251	-0.495	-169.034	169.039	
322	g			21	3		2	-1	-1	-1.407	1.081	3.532	3.952	
323	g			21	3		3	-1	-1	1.238	-0.490	-167.325	167.331	
324	g			21	3		4	5	-1	5.306	1.096	-165.451	165.540	
325	g			21	3		4	5	-1	-5.475	-0.505	1.658	5.743	
326	uu_1			2203	2		0	-1	24	24	-0.270	-0.102	909.438	909.438
327	g			21	2		2	-1	24	24	0.865	-0.288	18.625	18.647
328	g			21	2		2	-1	24	24	-0.703	-0.652	9.441	9.490
329	g			21	2		2	-1	24	24	0.258	0.449	1.528	1.613
330	ud_1_bar			-2103	2		1	-1	24	24	-0.698	-0.101	-804.292	804.293
331	d			1	2		0	-1	46	46	-0.055	0.975	30.513	30.530
332	g			21	2		2	-1	46	46	0.652	-0.014	2.556	2.638
333	g			21	2		2	-1	46	46	-0.467	0.522	2.989	3.070
334	g			21	2		2	-1	46	46	1.140	-1.976	-0.376	2.312
335	g			21	2		7	-1	46	46	-2.855	0.685	-0.325	2.954
336	g			21	2		7	-1	46	46	-1.316	-1.014	1.314	2.119
337	g			21	2		7	-1	46	46	-1.254	-0.169	0.033	1.265
338	g			21	2		6	-1	46	46	1.740	0.763	-38.053	38.101
339	g			21	2		6	-1	46	46	2.946	1.138	-113.819	113.863
340	g			21	2		6	-1	46	46	0.570	-0.811	-12.943	12.981
341	u_bar			-2	2		1	-1	46	46	-0.552	0.595	-6.627	6.685
342	string			92	2		8	12	25	45	-0.548	-0.693	134.739	1743.481
343	pi+			211	1		24	-1	-1	-1	-0.110	-0.320	266.881	266.881
344	neutron			2112	1		24	-1	-1	-1	-0.124	0.303	381.279	381.280
345	rho+			213	2		24	-1	65	66	-0.050	-0.476	138.324	138.327
346	rho-			-213	2		24	-1	67	68	0.442	0.286	98.894	98.898

347 rho+	213	2	24	-1	69	70	0.355	0.119	22.557	22.574
348 $\kappa^*$ -	-323	2	24	-1	71	72	-0.557	-0.371	13.054	13.100
349 $\kappa_0$	311	2	24	-1	73	73	-0.154	-0.086	3.114	3.158
350 rho+	213	2	24	-1	74	75	0.631	0.154	6.538	6.615
351 rho-	-213	2	24	-1	76	77	-0.102	-0.321	3.999	4.091
352 pi+	211	1	24	-1	-1	-1	-0.042	0.076	1.621	1.629
353 rho0	113	2	24	-1	78	79	-0.449	-0.026	1.186	1.590
354 eta'	331	2	24	-1	80	82	-0.373	-0.116	0.256	1.066
355 pi-	-211	1	24	-1	-1	-1	0.468	-0.008	0.150	0.511
356 $\kappa^*_0$ _bar	-313	2	24	-1	83	84	0.353	0.359	-2.044	2.292
357 $\kappa^+$	321	1	24	-1	-1	-1	0.046	0.653	-1.190	1.446
358 pi0	111	2	24	-1	85	86	-0.213	-0.607	-2.506	2.591
359 pi0	111	2	24	-1	87	88	-0.066	-0.551	-10.507	10.523
360 antiproton	-2212	1	24	-1	-1	-1	-0.171	0.299	-31.293	31.309
361 rho0	113	2	24	-1	89	90	0.338	-0.123	-20.132	20.150
362 Lambda0	3122	1	24	-1	-1	-1	-0.273	0.622	-95.683	95.692
363 sigma0_bar	-3212	2	24	-1	91	92	-0.496	-0.558	-639.757	639.759
364 string	92	2	13	23	47	64	0.548	0.693	-134.739	216.519
365 rho0	113	2	46	-1	93	94	0.489	0.208	16.323	16.351
366 rho0	113	2	46	-1	95	96	-0.671	0.725	9.582	9.668
367 rho-	-213	2	46	-1	97	98	0.065	-0.055	5.650	5.719
368 rho+	213	2	46	-1	99	100	0.428	0.490	2.075	2.306
369 rho0	113	2	46	-1	101	102	1.190	-0.931	1.795	2.468
370 rho-	-213	2	46	-1	103	104	-0.179	-0.447	0.648	1.125
371 $\kappa^*$ +	323	2	46	-1	105	106	-1.317	-0.112	-0.455	1.668
372 $\kappa^*_0$ _bar	-313	2	46	-1	107	108	-1.618	-0.420	0.946	2.130
373 rho0	113	2	46	-1	109	110	-0.600	0.251	-0.093	1.107
374 neutron	2112	1	46	-1	-1	-1	-0.793	-0.051	-0.364	1.283
375 Lambda0_bar	-3122	1	46	-1	-1	-1	0.120	-0.786	-1.198	1.820
376 $\kappa^*$ -	-323	2	46	-1	111	112	-1.210	0.568	-0.803	1.794
377 rho0	113	2	46	-1	113	114	1.114	-0.284	-28.460	28.504
378 rho+	213	2	46	-1	115	116	0.749	0.213	-34.995	35.012

379	omega	223	2	46	-1	117	119	0.886	0.708	-22.158	22.201
380	k0	311	2	46	-1	120	120	2.327	0.169	-60.205	60.252
381	k*0_bar	-313	2	46	-1	121	122	-0.530	0.507	-16.419	16.461
382	rho-	-213	2	46	-1	123	124	0.100	-0.062	-6.609	6.650
383	pi+	211	1	27	-1	-1	-1	0.173	0.085	60.425	60.426
384	pi0	111	2	27	-1	125	126	-0.223	-0.561	77.899	77.902
385	pi-	-211	1	28	-1	-1	-1	0.397	-0.044	78.787	78.788
386	pi0	111	2	28	-1	127	128	0.045	0.330	20.107	20.110
387	pi+	211	1	29	-1	-1	-1	0.406	0.284	8.717	8.733
388	pi0	111	2	29	-1	129	130	-0.051	-0.166	13.840	13.842
389	k-	-321	1	30	-1	-1	-1	-0.652	-0.210	9.028	9.068
390	pi0	111	2	30	-1	131	132	0.095	-0.161	4.026	4.032
391	k_s0	310	1	31	-1	-1	-1	-0.154	-0.086	3.114	3.158
392	pi+	211	1	32	-1	-1	-1	0.315	0.378	2.229	2.287
393	pi0	111	2	32	-1	133	134	0.316	-0.223	4.309	4.328
394	pi-	-211	1	33	-1	-1	-1	-0.184	0.061	0.383	0.451
395	pi0	111	2	33	-1	135	136	0.082	-0.382	3.616	3.640
396	pi+	211	1	35	-1	-1	-1	-0.557	0.063	1.254	1.381
397	pi-	-211	1	35	-1	-1	-1	0.109	-0.088	-0.068	0.209
398	pi+	211	1	36	-1	-1	-1	0.033	0.063	0.099	0.185
399	pi-	-211	1	36	-1	-1	-1	-0.064	-0.099	-0.064	0.194
400	eta	221	2	36	-1	137	138	-0.342	-0.080	0.220	0.687
401	k0_bar	-311	2	38	-1	139	139	0.227	-0.044	-0.793	0.964
402	pi0	111	2	38	-1	140	141	0.127	0.403	-1.251	1.327
403	gamma	22	1	40	-1	-1	-1	-0.039	-0.313	-1.221	1.261
404	gamma	22	1	40	-1	-1	-1	-0.174	-0.294	-1.286	1.330
405	gamma	22	1	41	-1	-1	-1	-0.025	-0.495	-8.614	8.628
406	gamma	22	1	41	-1	-1	-1	-0.041	-0.056	-1.893	1.894
407	pi+	211	1	43	-1	-1	-1	-0.110	-0.066	-13.406	13.407
408	pi-	-211	1	43	-1	-1	-1	0.448	-0.057	-6.726	6.743
409	Lambda0_bar	-3122	1	45	-1	-1	-1	-0.431	-0.512	-561.832	561.834
410	gamma	22	1	45	-1	-1	-1	-0.065	-0.046	-77.925	77.925

411 pi-	-211	1	47	-1	-1	-1	0.631	0.161	8.760	8.786
412 pi+	211	1	47	-1	-1	-1	-0.143	0.048	7.563	7.565
413 pi+	211	1	48	-1	-1	-1	-0.609	0.472	8.747	8.782
414 pi-	-211	1	48	-1	-1	-1	-0.062	0.253	0.835	0.886
415 pi-	-211	1	49	-1	-1	-1	0.299	0.209	4.265	4.283
416 pi0	111	2	49	-1	142	143	-0.234	-0.264	1.386	1.436
417 pi+	211	1	50	-1	-1	-1	0.226	0.630	1.731	1.862
418 pi0	111	2	50	-1	144	145	0.202	-0.141	0.344	0.444
419 pi+	211	1	51	-1	-1	-1	0.722	-0.816	0.816	1.368
420 pi-	-211	1	51	-1	-1	-1	0.468	-0.115	0.979	1.100
421 pi-	-211	1	52	-1	-1	-1	0.125	-0.535	0.477	0.741
422 pi0	111	2	52	-1	146	147	-0.304	0.088	0.171	0.384
423 k+	321	1	53	-1	-1	-1	-0.849	0.190	-0.129	1.008
424 pi0	111	2	53	-1	148	150	-0.468	-0.302	-0.326	0.659
425 k-	-321	1	54	-1	-1	-1	-0.633	-0.050	0.634	1.024
426 pi+	211	1	54	-1	-1	-1	-0.985	-0.370	0.312	1.106
427 pi-	-211	1	55	-1	-1	-1	-0.309	0.163	-0.471	0.603
428 pi+	211	1	55	-1	-1	-1	-0.291	0.088	0.378	0.504
429 k-	-321	1	58	-1	-1	-1	-0.997	0.196	-0.425	1.207
430 pi0	111	2	58	-1	151	152	-0.213	0.372	-0.378	0.587
431 pi-	-211	1	59	-1	-1	-1	1.135	-0.344	-16.618	16.661
432 pi+	211	1	59	-1	-1	-1	-0.022	0.061	-11.843	11.844
433 pi+	211	1	60	-1	-1	-1	0.445	-0.249	-15.537	15.546
434 pi0	111	2	60	-1	153	154	0.303	0.462	-19.457	19.466
435 pi+	211	1	61	-1	-1	-1	0.358	0.322	-5.310	5.334
436 pi-	-211	1	61	-1	-1	-1	0.363	0.044	-6.450	6.462
437 pi0	111	2	61	-1	155	156	0.165	0.341	-10.398	10.406
438 k_s0	310	1	62	-1	-1	-1	2.327	0.169	-60.205	60.252
439 k0_bar	-311	2	63	-1	157	157	-0.364	0.530	-15.260	15.282
440 pi0	111	2	63	-1	158	159	-0.166	-0.022	-1.159	1.179
441 pi-	-211	1	64	-1	-1	-1	0.357	0.107	-3.691	3.713
442 pi0	111	2	64	-1	160	161	-0.257	-0.169	-2.918	2.937



475	K_L0	130	1	121	-1	-1	-1	-0.364	0.530	-15.260	15.282
476	gamma	22	1	122	-1	-1	-1	-0.111	-0.022	-1.054	1.060
477	gamma	22	1	122	-1	-1	-1	-0.056	-0.105	0.119	-
478	gamma	22	1	124	-1	-1	-1	-0.015	-0.013	-0.037	0.042
479	gamma	22	1	124	-1	-1	-1	-0.242	-0.156	-2.881	2.895
----- interaction 4 -----											
480	proton	2212	3	-1	-1	-1	-1		<sup>98</sup>	<sup>98</sup>	
481	antiproton	-2212	3	-1	-1	-1	-1		<sup>-98</sup>	<sup>98</sup>	
482	u	2	3	0	-1	-1	-1	0.460	-0.217	6.160	6.181
483	g	21	3	1	-1	-1	-1	0.695	-0.550	-319.205	319.207
484	u	2	3	2	-1	-1	-1	0.459	-0.216	6.135	6.156
485	g	21	3	3	-1	-1	-1	-0.670	1.915	-75.024	75.051
486	u	2	3	4	5	-1	-1	1.507	-2.517	5.732	6.447
487	g	21	3	4	5	-1	-1	-1.719	4.216	-74.621	74.759
488	u	2	2	6	-1	18	18	0.981	-2.334	3.054	3.981
489	g	21	2	6	-1	18	18	0.504	-0.143	2.467	2.522
490	g	21	2	3	-1	18	18	0.891	-0.878	-73.629	73.640
491	g	21	2	3	-1	18	18	-0.060	-0.934	-134.053	134.056
492	g	21	2	3	-1	18	18	0.536	-0.653	-36.475	36.485
493	u_bar	-2	2	1	-1	18	18	-0.289	-0.167	-19.096	19.102
494	ud_0	2101	2	0	-1	30	30	-0.460	0.217	973.826	973.826
495	g	21	2	7	-1	30	30	-3.198	3.493	-62.724	62.903
496	g	21	2	7	-1	30	30	1.501	0.683	-11.685	11.801
497	ud_0_bar	-2101	2	1	-1	30	30	-0.406	0.718	-641.684	641.684
498	string	92	2	8	13	19	29	2.563	-5.110	-257.732	269.785
499	proton	2212	1	18	-1	-1					
-1	1.049	-1.125	3.172	3.648							
500	antineutron	-2112	1	18	-1	-1	-1	-0.088	-1.399	0.589	1.787
501	rho-	-213	2	18	-1	48	49	0.119	-0.143	0.386	0.806
502	pi+	211	1	18	-1	-1	-1	0.849	-0.110	0.511	1.006
503	pi-	-211	1	18	-1	-1	-1	-0.278	0.395	-1.957	2.021
504	omega	223	2	18	-1	50	52	-0.055	-0.498	-26.056	26.072
505	pi0	111	2	18	-1	53	54	0.144	-0.004	-3.840	3.845
506	pi+	211	1	18	-1	-1	-1	0.426	-0.268	-74.891	74.892
507	pi-	-211	1	18	-1	-1	-1	0.286	-0.552	-9.698	9.719

508 pi+	211	1	18	-1	-1	-1	-0.739	0.243	-13.971	13.994
509 rho-	-213	2	18	-1	55	56	0.850	-1.649	-131.977	131.994
510 string	92	2	14	17	31	47	-2.563	5.110	257.732	1690.215
511 neutron	2112	1	30	-1	-1	-1	0.157	0.645	560.412	560.413
512 omega	223	2	30	-1	57	59	-0.518	-0.595	346.450	346.452
513 $\kappa^0_{\text{bar}}$	-313	2	30	-1	60	61	-0.071	0.175	21.897	21.917
514 $\kappa^0$	313	2	30	-1	62	63	0.277	-0.184	15.167	15.197
515 pi0	111	2	30	-1	64	66	-0.584	0.107	8.684	8.705
516 rho+	213	2	30	-1	67	68	0.089	-0.294	9.789	9.827
517 antiproton	-2212	1	30	-1	-1	-1	0.010	0.513	3.568	3.725
518 proton	2212	1	30	-1	-1	-1	-0.035	-0.461	7.643	7.715
519 antiproton	-2212	1	30	-1	-1	-1	-0.864	2.220	-29.424	29.535
520 proton	2212	1	30	-1	-1	-1	-1.652	0.763	-23.315	23.404
521 $\kappa^*-$	-323	2	30	-1	69	70	0.744	0.823	-13.604	13.687
522 $\kappa^0$	313	2	30	-1	71	72	-0.792	-0.169	-14.567	14.613
523 pi0	111	2	30	-1	73	74	0.792	0.773	-19.684	19.715
524 pi+	211	1	30	-1	-1	-1	0.030	-0.029	-4.650	4.652
525 pi-	-211	1	30	-1	-1	-1	-0.389	0.162	-7.842	7.854
526 pi0	111	2	30	-1	75	76	0.549	-0.339	-36.224	36.230
527 antineutron	-2112	1	30	-1	-1	-1	-0.307	0.999	-566.570	566.572
528 pi-	-211	1	21	-1	-1	-1	0.265	-0.197	0.464	0.586
529 pi0	111	2	21	-1	77	78	-0.146	0.053	-0.079	0.220
530 pi+	211	1	24	-1	-1	-1	-0.043	-0.021	-1.415	1.422
531 pi-	-211	1	24	-1	-1	-1	0.123	-0.054	-8.322	8.324
532 pi0	111	2	24	-1	79	80	-0.135	-0.423	-16.319	16.325
533 gamma	22	1	25	-1	-1	-1	0.024	0.015	-0.124	0.127
534 gamma	22	1	25	-1	-1	-1	0.121	-0.019	-3.716	3.718
535 pi-	-211	1	29	-1	-1	-1	0.173	-0.521	-17.696	17.705
536 pi0	111	2	29	-1	81	82	0.677	-1.128	-114.282	114.289
537 pi+	211	1	32	-1	-1	-1	0.069	-0.084	90.105	90.105
538 pi-	-211	1	32	-1	-1	-1	-0.304	-0.064	73.543	73.544
539 pi0	111	2	32	-1	83	84	-0.284	-0.447	182.802	182.803



540	K-												
				-321	1	33	-1	-1	-1	-0.041	0.296	20.375	20.384
541	pi+			211	1	33	-1	-1	-1	-0.029	-0.121	1.522	1.533
542	K0			311	2	34	-1	85	85	0.018	0.003	5.113	5.137
543	pi0			111	2	34	-1	86	87	0.260	-0.187	10.054	10.060
544	gamma			22	1	35	-1	-1	-1	-0.242	0.082	2.967	2.978
-	0.001	0.001											
545	e-			11	1	35	-1	-1	-1	-0.295	0.013	4.914	4.923
-	0.001	0.001											
546	e+			-11	1	35	-1	-1	-1	-0.046	0.012	0.803	0.804
-	0.001	0.001											
547	pi+			211	1	36	-1	-1	-1	0.282	-0.477	6.634	6.658
548	pi0			111	2	36	-1	88	89	-0.193	0.183	3.155	3.169
549	K-			-321	1	41	-1	-1	-1	0.335	0.294	-9.834	9.856
550	pi0			111	2	41	-1	90	91	0.409	0.528	-3.770	3.831
551	K+			321	1	42	-1	-1	-1	-0.473	0.064	-6.758	6.793
552	pi-			-211	1	42	-1	-1	-1	-0.319	-0.233	-7.809	7.820
553	gamma			22	1	43	-1	-1	-1	0.702	0.619	-16.272	16.299
-	0.004	0.004											
554	gamma			22	1	43	-1	-1	-1	0.090	0.154	-3.411	3.416
-	0.004	0.004											
555	gamma			22	1	46	-1	-1	-1	0.136	-0.044	-10.687	10.688
0.001	-	-0.036	0.036										
556	gamma			22	1	46	-1	-1	-1	0.413	-0.295	-25.536	25.541
0.001	-	-0.036	0.036										
557	gamma			22	1	49	-1	-1	-1	-0.017	0.055	0.016	0.060
-	-												
558	gamma			22	1	49	-1	-1	-1	-0.129	-0.002	-0.095	0.160
-	-												
559	gamma			22	1	52	-1	-1	-1	-0.057	-0.196	-5.203	5.207
-	-	-0.007	0.007										
560	gamma			22	1	52	-1	-1	-1	-0.078	-0.227	-11.116	11.118
-	-	-0.007	0.007										
561	gamma			22	1	56	-1	-1	-1	0.221	-0.418	-46.377	46.380
-	-	0.003	0.003										
562	gamma			22	1	56	-1	-1	-1	0.455	-0.710	-67.904	67.910
-	-	0.003	0.003										
563	gamma			22	1	59	-1	-1	-1	-0.111	-0.241	110.113	110.113
-	-	0.056	0.056										
564	gamma			22	1	59	-1	-1	-1	-0.172	-0.206	72.689	72.690
-	-	0.056	0.056										
565	K_L0			130	1	62	-1	-1	-1	0.018	0.003	5.113	5.137
566	gamma			22	1	63	-1	-1	-1	0.094	-0.007	1.927	1.929
-	0.001	0.001											
567	gamma			22	1	63	-1	-1	-1	0.165	-0.180	8.127	8.131
-	0.001	0.001											
568	gamma			22	1	68	-1	-1	-1	-0.078	0.054	1.882	1.884
-	-												
569	gamma			22	1	68	-1	-1	-1	-0.115	0.129	1.273	1.285
-	-												
570	gamma			22	1	70	-1	-1	-1	0.014	0.014	-0.324	0.325
-	0.003	0.003											
571	gamma			22	1	70	-1	-1	-1	0.395	0.515	-3.446	3.506

-0.003	0.003	interaction 5										
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572 proton		2212	3	-1	-1	-1	-1	98	98			
573 antiproton		-2212	3	-1	-1	-1	-1	-98	98			
574 g		21	3	0	-1	-1	-1	-0.943	-0.254	29.384	29.400	
575 g		21	3	1	-1	-1	-1	-0.438	-0.232	-7.355	7.372	
576 g		21	3	2	-1	-1	-1	0.898	1.088	2.925	3.248	
577 g		21	3	3	-1	-1	-1	0.415	0.657	-3.468	3.554	
578 g		21	3	4	5	-1	-1	2.972	0.824	1.964	3.657	
579 g		21	3	4	5	-1	-1	-1.660	0.920	-2.507	3.145	
580 ud_0		2101	2	0	-1	20	20	0.419	0.253	721.760	721.760	
581 g		21	2	2	-1	20	20	-0.248	-1.891	20.094	20.184	
582 g		21	2	2	-1	20	20	-1.596	0.557	5.905	6.142	
583 g		21	2	6	-1	20	20	1.366	1.828	0.732	2.397	
584 g		21	2	6	-1	20	20	0.840	-0.944	0.449	1.341	
585 g		21	2	7	-1	20	20	0.394	0.523	-0.346	0.741	
586 g		21	2	7	-1	20	20	-0.066	0.552	-0.746	0.930	
587 g		21	2	7	-1	20	20	-1.223	-0.215	-0.631	1.393	
588 ud_0_bar		-2101	2	1	-1	20	20	0.804	0.048	-957.610	957.611	
589 u		2	2	0	-1	49	49	0.524	0.001	228.834	228.835	
590 g		21	2	3	-1	49	49	-0.849	-0.898	-3.428	3.644	
591 u_bar		-2	2	1	-1	49	49	-0.365	0.184	-15.012	15.022	
592 string		92	2	8	16	21	48	0.690	0.713	-210.394	1712.499	
593 neutron		2112	1	20	-1	-1	-1	-0.079	0.589	299.679	299.681	
594 pi0		111	2	20	-1	68	69	0.435	-0.559	253.074	253.075	
595 pi+		211	1	20	-1	-1	-1	-0.332	0.461	28.665	28.671	
596 rho-		-213	2	20	-1	70	71	0.335	-0.207	32.258	32.270	
597 rho0		113	2	20	-1	72	73	0.066	-0.738	87.165	87.172	
598 k0_bar		-311	2	20	-1	74	74	-0.222	-0.170	6.890	6.914	
599 k0		311	2	20	-1	75	75	0.008	0.200	15.463	15.472	
600 Delta-		-2214	2	20	-1	76	77	-0.567	0.192	5.351	5.510	
601 Delta++		2224	2	20	-1	78	79	-0.240	-0.408	7.823	7.951	
602 rho0		113	2	20	-1	80	81	0.061	-0.571	8.026	8.111	
603 rho-		-213	2	20	-1	82	83	0.601	0.185	0.918	1.305	

604	$\kappa^0_{\text{bar}}$	-313	2	20	-1	84	85	0.013	0.645	0.879	1.418
605	$\kappa^0$	311	2	20	-1	86	86	-0.106	-0.394	2.130	2.226
606	$\pi^+$	211	1	20	-1	-1	-1	0.213	0.712	0.235	0.792
607	$\omega$	223	2	20	-1	87	89	0.353	0.402	0.958	
608	$\rho^0$	113	2	20	-1	90	91	0.309	0.444	-0.383	0.833
609	$\pi^-$	-211	1	20	-1	-1	-1	0.049	0.055	0.050	0.166
610	$\kappa^0_{\text{bar}}$	-313	2	20	-1	92	93	-0.498	-0.435	-0.273	1.253
611	$\kappa^0$	313	2	20	-1	94	95	-0.681	0.382	-2.771	3.043
612	$\rho^0$	113	2	20	-1	96	97	0.164	-0.049	-18.715	18.735
613	$\rho^+$	213	2	20	-1	98	99	0.139	0.029	-5.411	5.465
614	$\rho^-$	-213	2	20	-1	100	101	-0.283	-0.199	-18.552	18.572
615	$\pi^0$	111	2	20	-1	102	103	0.178	-0.425	-128.686	128.687
616	$\rho^0$	113	2	20	-1	104	105	0.141	0.684	-120.456	120.460
617	$\kappa^0_{\text{bar}}$	-311	2	20	-1	106	106	-0.017	0.248	-68.017	68.019
618	$\kappa^+$	321	1	20	-1	-1	-1	0.406	-0.158	-133.881	133.883
619	antiproton	-2212	1	20	-1	-1	-1	-0.110	-0.211	-219.473	219.475
620	$\eta$	221	2	20	-1	107	109	0.355	0.010	-242.382	242.383
621	string	92	2	17	19	50	67	-0.690	-0.713	210.394	247.501
622	$\kappa^+$	323	2	49	-1	110	111	0.657	-0.243	115.136	115.142
623	$\Lambda^0$	3122	1	49	-1	-1	-1	-0.169	0.381	41.550	41.567
624	$\pi^-$	-211	1	49	-1	-1	-1	-0.053	0.114	1.993	2.001
625	$\Delta^0_{\text{bar}}$	-2114	2	49	-1	112	113	-0.201	-0.876	33.392	33.428
626	neutron	2112	1	49	-1	-1	-1	0.530	0.878	7.986	8.106
627	$\Delta^0_{\text{bar}}$	-2114	2	49	-1	114	115	-0.177	-0.733	8.072	8.195
628	$\pi^0$	111	2	49	-1	116	117	-0.614	0.584	12.644	12.673
629	proton	2212	1	49	-1	-1	-1	0.599	-0.679	2.525	2.842
630	$\rho^0$	113	2	49	-1	118	119	-0.355	0.559	1.187	1.575
631	$\Delta^0_{\text{bar}}$	-2114	2	49	-1	120	121	0.194	0.334	0.856	1.536
632	$\pi^0$	111	2	49	-1	122	123	0.037	-0.785	1.429	1.637
633	$\kappa^0$	311	2	49	-1	124	124	-0.806	0.373	-0.112	1.024
634	$\kappa^-$	-321	1	49	-1	-1	-1	1.180	-0.312	-1.800	2.231
635	$\pi^+$	211	1	49	-1	-1	-1	-1.055	0.187	-2.640	2.853

636	pi-		-211	1	49	-1	-1	-1	0.170	-0.685	-0.623	0.952
637	rho+		213	2	49	-1	125	126	-0.515	0.307	-0.858	1.110
638	rho0		113	2	49	-1	127	128	0.587	0.507	-2.758	2.945
639	rho-		-213	2	49	-1	129	130	-0.702	-0.622	-7.585	7.684
640	gamma		22	1	22	-1	-1	-1	0.273	-0.268	150.558	150.559
-	0.051	0.051										
641	gamma		22	1	22	-1	-1	-1	0.162	-0.291	102.516	102.516
-	0.051	0.051										
642	pi-		-211	1	24	-1	-1	-1	0.455	-0.380	22.743	22.752
643	pi0		111	2	24	-1	131	132	-0.120	0.173	9.515	9.518
644	pi+		211	1	25	-1	-1	-1	-0.189	-0.016	11.582	11.585
645	pi-		-211	1	25	-1	-1	-1	0.255	-0.722	75.583	75.587
646	K_S0		310	1	26	-1	-1	-1	-0.222	-0.170	6.890	6.914
647	K_S0		310	1	27	-1	-1	-1	0.008	0.200	15.463	15.472
648	antiproton		-2212	1	28	-1	-1	-1	-0.385	0.079	4.751	4.858
649	pi0		111	2	28	-1	133	134	-0.182	0.113	0.600	0.651
650	proton		2212	1	29	-1	-1	-1	-0.341	-0.270	7.415	7.487
651	pi+		211	1	29	-1	-1	-1	0.101	-0.138	0.408	0.464
652	pi-		-211	1	30	-1	-1	-1	0.175	0.203	3.708	3.720
653	pi+		211	1	30	-1	-1	-1	-0.113	-0.775	4.319	4.391
654	pi-		-211	1	31	-1	-1	-1	-0.095	-0.031	0.269	0.319
655	pi0		111	2	31	-1	135	136	0.697	0.216	0.648	0.985
656	K0_bar		-311	2	32	-1	137	137	0.132	0.735	0.540	1.048
657	gamma		22	1	32	-1	-1	-1	-0.119	-0.090	0.339	0.370
658	K_S0		310	1	33	-1	-1	-1	-0.106	-0.394	2.130	2.226
659	pi+		211	1	35	-1	-1	-1	0.212	0.093	0.132	0.301
660	pi-		-211	1	35	-1	-1	-1	0.020	0.395	-0.005	0.419
661	pi0		111	2	35	-1	138	139	0.121	-0.086	-0.127	0.238
662	pi+		211	1	36	-1	-1	-1	0.190	0.358	-0.034	0.430
663	pi-		-211	1	36	-1	-1	-1	0.119	0.086	-0.348	0.403
664	K0_bar		-311	2	38	-1	140	140	-0.070	-0.149	-0.450	0.691
665	pi0		111	2	38	-1	141	142	-0.429	-0.286	0.178	0.562
666	K+		321	1	39	-1	-1	-1	-0.120	-0.084	-1.109	1.222

667 pi-			-211	1	39	-1	-1	-1	-0.561	0.466	-1.662	1.821
668 pi-			-211	1	40	-1	-1	-1	-0.123	0.307	-5.707	5.718
669 pi+			211	1	40	-1	-1	-1	0.287	-0.356	-13.008	13.017
670 pi+			211	1	41	-1	-1	-1	0.296	0.277	-2.470	2.507
671 pi0			111	2	41	-1	143	144	-0.157	-0.248	-2.941	2.958
672 pi-			-211	1	42	-1	-1	-1	0.066	0.179	-10.448	10.451
673 pi0			111	2	42	-1	145	146	-0.349	-0.377	-8.104	8.121
674 gamma			22	1	43	-1	-1	-1	0.021	-0.222	-63.391	63.391
- 675 gamma	0.005		22	1	43	-1	-1	-1	0.156	-0.203	-65.296	65.296
- 676 pi+	0.005		211	1	44	-1	-1	-1	0.340	0.252	-30.310	30.313
677 pi-			-211	1	44	-1	-1	-1	-0.199	0.432	-90.146	90.148
678 K_L0			130	1	45	-1	-1	-1	-0.017	0.248	-68.017	68.019
679 pi0			111	2	48	-1	147	148	0.113	0.085	-92.183	92.183
680 pi0			111	2	48	-1	149	150	0.146	0.085	-80.646	80.646
681 pi0			111	2	48	-1	151	152	0.096	-0.160	-69.553	69.553
682 K0			311	2	50	-1	153	153	0.318	0.127	69.995	69.998
683 pi+			211	1	50	-1	-1	-1	0.339	-0.370	45.141	45.144
684 antineutron			-2112	1	53	-1	-1	-1	-0.002	-0.895	27.761	27.791
685 pi0			111	2	53	-1	154	155	-0.199	0.019	5.631	5.636
686 antineutron			-2112	1	55	-1	-1	-1	0.048	-0.515	6.164	6.256
687 pi0			111	2	55	-1	156	157	-0.224	-0.218	1.908	1.938
688 gamma			22	1	56	-1	-1	-1	-0.601	0.527	11.834	11.861
- 689 gamma	0.003	0.003	22	1	56	-1	-1	-1	-0.013	0.058	0.810	0.813
- 690 pi-	0.003	0.003	-211	1	58	-1	-1	-1	-0.339	0.095	0.110	0.394
691 pi+			211	1	58	-1	-1	-1	-0.016	0.465	1.077	1.181
692 antineutron			-2112	1	59	-1	-1	-1	0.233	0.299	0.928	1.374
693 pi0			111	2	59	-1	158	159	-0.039	0.035	-0.072	0.162
694 gamma			22	1	60	-1	-1	-1	0.039	-0.111	0.289	0.312
- 695 gamma			22	1	60	-1	-1	-1	-0.002	-0.674	1.140	1.324
- 696 K_L0			130	1	61	-1	-1	-1	-0.806	0.373	-0.112	1.024
697 pi+			211	1	65	-1	-1	-1	-0.152	0.045	-0.140	0.253
698 pi0			111	2	65	-1	160	161	-0.363	0.261	-0.718	0.856

699 pi-	-211	1	66	-1	-1	-1	0.689	0.378	-1.896	2.057
700 pi+	211	1	66	-1	-1	-1	-0.102	0.129	-0.862	0.888
701 pi-	-211	1	67	-1	-1	-1	-0.817	-0.367	-6.068	6.136
702 pi0	111	2	67	-1	162	163	0.115	-0.255	-1.517	1.549
703 gamma	22	1	71	-1	-1	-1	-0.047	0.105	7.433	7.434
704 gamma	22	1	71	-1	-1	-1	-0.073	0.068	2.082	2.084
705 gamma	22	1	77	-1	-1	-1	-0.082	0.087	0.163	0.202
706 gamma	22	1	77	-1	-1	-1	-0.100	0.026	0.437	0.449
707 gamma	22	1	83	-1	-1	-1	0.488	0.100	0.383	0.629
0.001 708 gamma	22	1	83	-1	-1	-1	0.209	0.115	0.265	0.356
0.001 709 K_L0	130	1	84	-1	-1	-1	0.132	0.735	0.540	1.048
710 gamma	22	1	89	-1	-1	-1	0.091	0.016	-0.043	0.102
711 gamma	22	1	89	-1	-1	-1	0.030	-0.102	-0.084	0.136
712 K_S0	310	1	92	-1	-1	-1	-0.070	-0.149	-0.450	0.691
713 gamma	22	1	93	-1	-1	-1	-0.118	-0.028	0.002	0.121
714 gamma	22	1	93	-1	-1	-1	-0.311	-0.258	0.176	0.441
715 gamma	22	1	99	-1	-1	-1	-0.128	-0.159	-2.471	2.480
-0.002 716 gamma	22	1	99	-1	-1	-1	-0.029	-0.089	-0.469	0.479
-0.002 717 gamma	22	1	101	-1	-1	-1	-0.264	-0.246	-6.429	6.439
718 gamma	22	1	101	-1	-1	-1	-0.085	-0.131	-1.675	1.682
719 gamma	22	1	107	-1	-1	-1	0.130	0.032	-53.511	53.512
-0.029 0.029 720 gamma	22	1	107	-1	-1	-1	-0.017	0.053	-38.672	38.672
-0.029 0.029 721 gamma	22	1	108	-1	-1	-1	0.070	0.010	-12.062	12.062
-0.005 0.005 722 gamma	22	1	108	-1	-1	-1	0.076	0.075	-68.584	68.585
-0.005 0.005 723 gamma	22	1	109	-1	-1	-1	0.025	-0.006	-2.004	2.004
-0.014 0.014 724 gamma	22	1	109	-1	-1	-1	0.071	-0.154	-67.549	67.549
-0.014 0.014 725 K_S0	310	1	110	-1	-1	-1	0.318	0.127	69.995	69.998
726 gamma	22	1	113	-1	-1	-1	0.010	0.030	0.896	0.897
0.002 0.002 727 gamma	22	1	113	-1	-1	-1	-0.209	-0.011	4.735	4.740
0.002 0.002 728 gamma	22	1	115	-1	-1	-1	-0.237	-0.183	1.590	1.618
0.001 0.001 729 gamma	22	1	115	-1	-1	-1	0.013	-0.035	0.318	0.320
0.001 0.001 730 gamma	22	1	121	-1	-1	-1	-0.004	-0.048	-0.004	0.049

731	gamma		22	1	121	-1	-1	-1	-0.035	0.083	-0.068	0.113
732	gamma		22	1	126	-1	-1	-1	-0.209	0.126	-0.270	0.364
733	gamma		22	1	126	-1	-1	-1	-0.154	0.136	-0.448	0.493
734	gamma		22	1	130	-1	-1	-1	0.105	-0.271	-1.454	1.483
735	gamma		22	1	130	-1	-1	-1	0.010	0.016	-0.063	0.066
----- interaction 6 -----												
736	proton		2212	3		-1	-1	-1		98	98	
737	antiproton		-2212	3		-1	-1	-1		-98	98	
738	*** unknown ***		9902210	3		0	-1	-1	-1	-0.304	0.270	979.993 980.006
739	*** unknown ***		-9902210	3		1	-1	-1	-1	0.304	-0.270	-979.993
740	ud_0		2101	2	2	-1	9	9	-0.294	0.261	947.895	947.895
741	g		21	2	2	-1	9	9	-	-0.006	0.006	
742	u		2	2	2	-1	9	9	-0.010	0.009	32.104	32.106
743	pi0		111	2	3	-1	14	15	-0.109	-0.084	-132.562	132.562
744	Delta-		-2214	2	3	-1	16	17	0.413	-0.186	-847.431	847.432
745	string		92	2	4	6	10	13	-0.304	0.270	979.993	980.006
746	neutron		2112	1	9	-1	-1	-1	-0.531	0.329	618.746	618.747
747	eta'		331	2	9	-1	18	20	0.748	0.285	186.821	186.825
748	k0_bar		-311	2	9	-1	21	21	-0.625	-0.197	152.306	152.308
749	k+		321	1	9	-1	-1	-1	0.104	-0.147	22.120	22.126
750	gamma		22	1	7	-1	-1	-1	-0.102	-0.094	-69.449	69.449
751	gamma	-0.003 0.003	22	1	7	-1	-1	-1	-0.006	0.010	-63.112	63.112
752	antiproton	-0.003 0.003	-2212	1	8	-1	-1	-1	0.341	-0.196	-515.298	515.299
753	pi0		111	2	8	-1	22	23	0.071	0.010	-332.133	332.133
754	pi0		111	2	11	-1	24	25	0.136	-0.004	15.911	15.912
755	pi0		111	2	11	-1	26	27	0.045	0.137	23.537	23.538
756	eta		221	2	11	-1	28	30	0.567	0.152	147.373	147.375
757	K_L0		130	1	12	-1	-1	-1	-0.625	-0.197	152.306	152.308
758	gamma	-0.010 0.010	22	1	17	-1	-1	-1	-0.009	0.032	-23.476	23.476
759	gamma	-0.010 0.010	22	1	17	-1	-1	-1	0.080	-0.022	-308.657	308.657
760	gamma	0.002 0.002	22	1	18	-1	-1	-1	0.111	-0.018	15.377	15.378
761	gamma	0.002 0.002	22	1	18	-1	-1	-1	0.025	0.013	0.534	0.534
762	gamma	0.005 0.005	22	1	19	-1	-1	-1	0.052	-0.007	6.767	6.767

763 gamma 0.005 0.005	22	1	19	-1	-1	-1	-0.007	0.144	16.769	16.770
764 pi+	211	1	20	-1	-1	-1	0.130	0.078	31.586	31.586
765 pi-	-211	1	20	-1	-1	-1	0.408	0.005	77.362	77.363
766 pi0	111	2	20	-1	31	32	0.028	0.069	38.426	38.426
767 gamma 0.007 0.007	22	1	30	-1	-1	-1	0.078	0.046	17.241	17.241