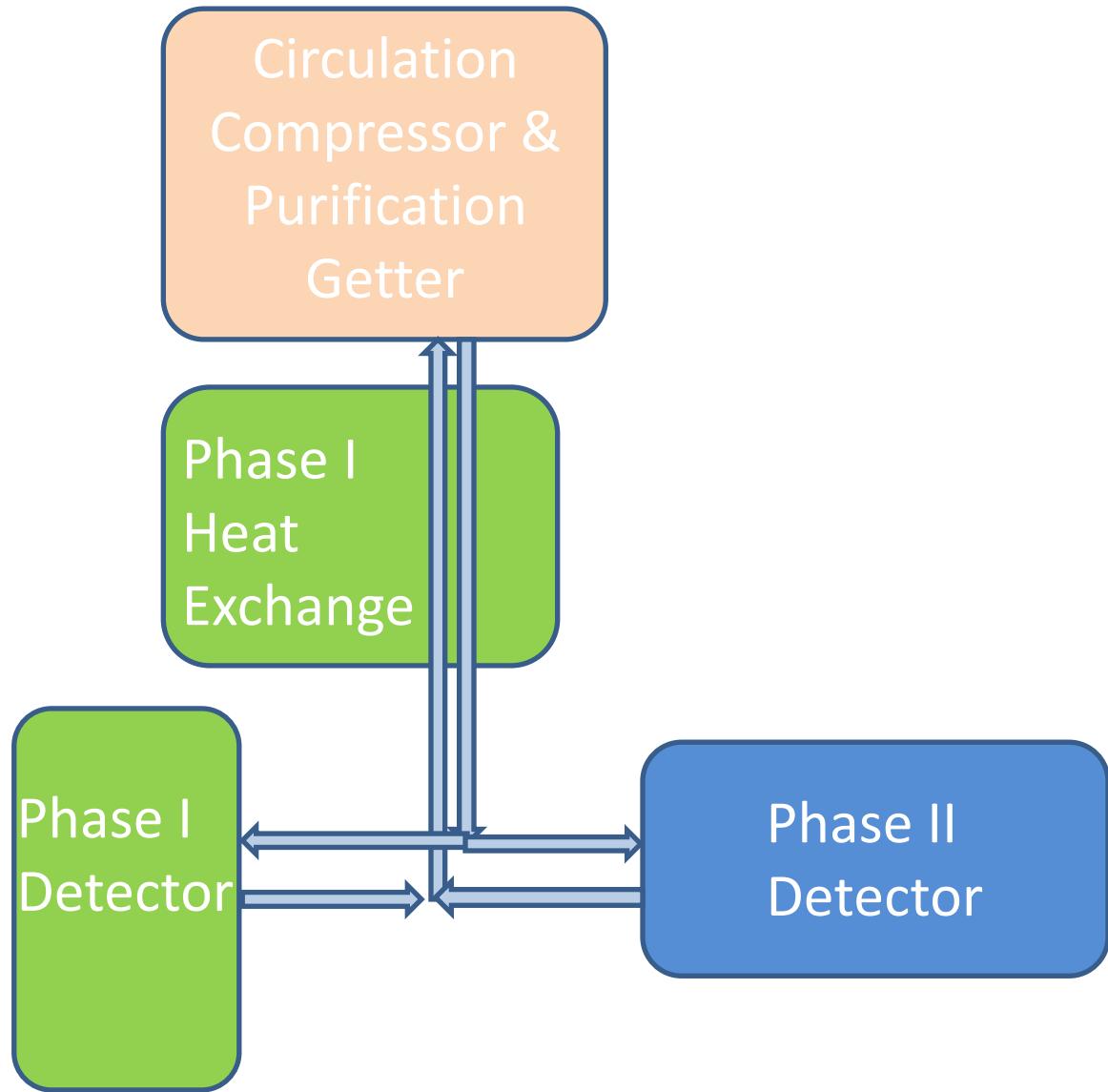


Steps Towards a System Test

Second Phase

Shaun Alsum

Basic Layout



Main areas of consideration

- Vessel
- Cooling
- Liquid lines to detector
- Recovery

Vessel

- 4 holes, what goes in where? (HV, liquid in, liquid out, ??)
- What instrumentation is required?
 - Thermometers
 - Level sensor?
 - Pressure?
- Pressure equalization lines needed?
- Where, exactly, will it be positioned?

Cooling

- How many thermosyphons needed?
 - Double headed? (3 TS?)
- Precooling needed?
 - How to precool
 - Some direct flow of LN?

Liquid Lines

- Do we need to cool them? TS?
- What sizes do we want? (LZ looks like it has .75" outlet, two .625" inlets)
- Should we test out liquid control valves?
 - LZ ones are \$11k, 50cm standoffs
- Need to redesign U-tube accordingly, and perhaps have room for TS and rtds

Recovery

- Too much for SRV,
hopefully can borrow
LUX compressor
 - Max in: 30 PSIG
 - Max out: 1200 PSIG
 - Max achieved flow: 18
SLPM
- Compressor and bottle
farm located in
compressor shack
- To Getter or not to
getter?



Possible Recovery Path

