

HTMap

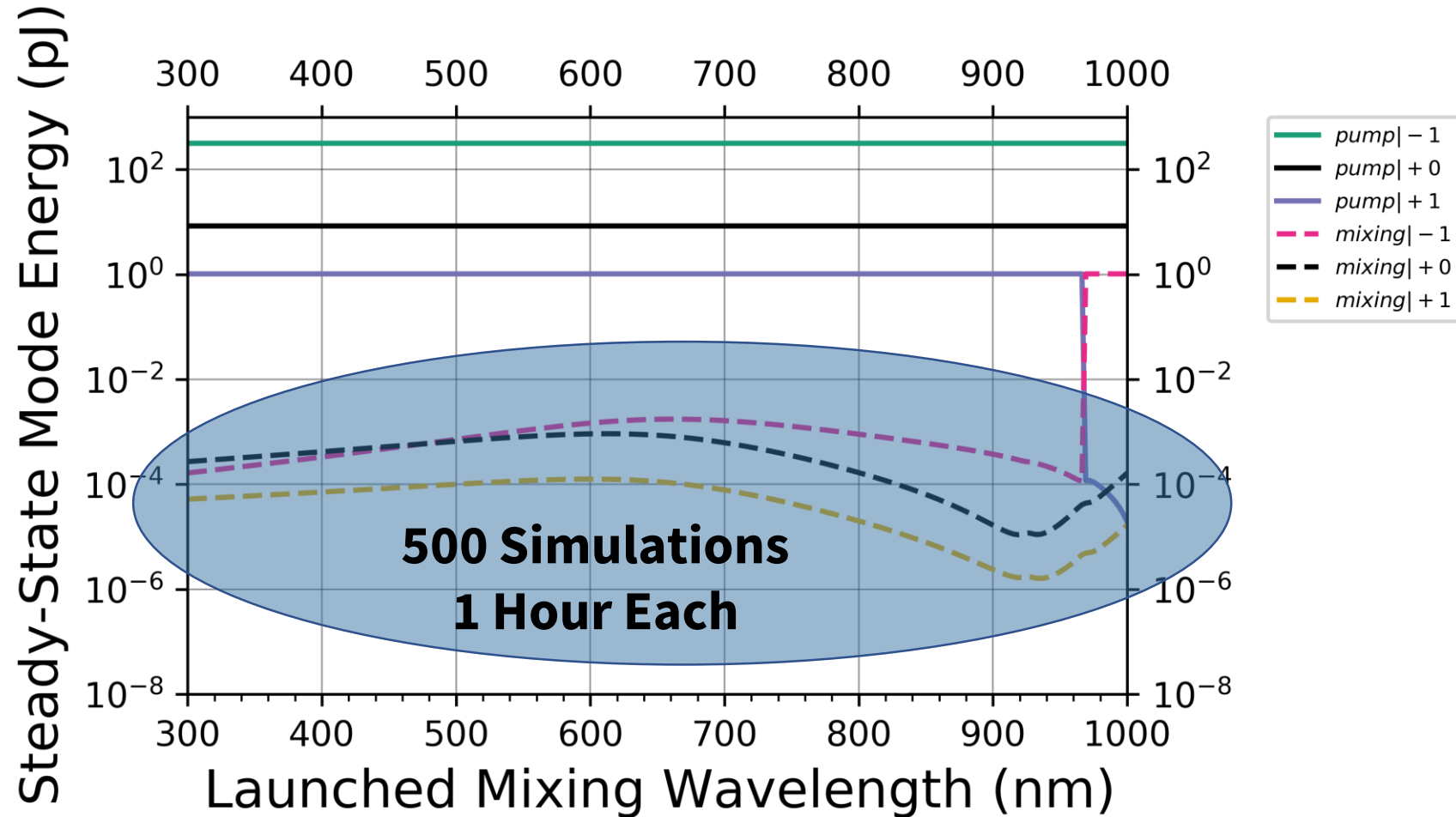
High-Throughput
Computing in Python,
Powered by HTCondor

Josh Karpel

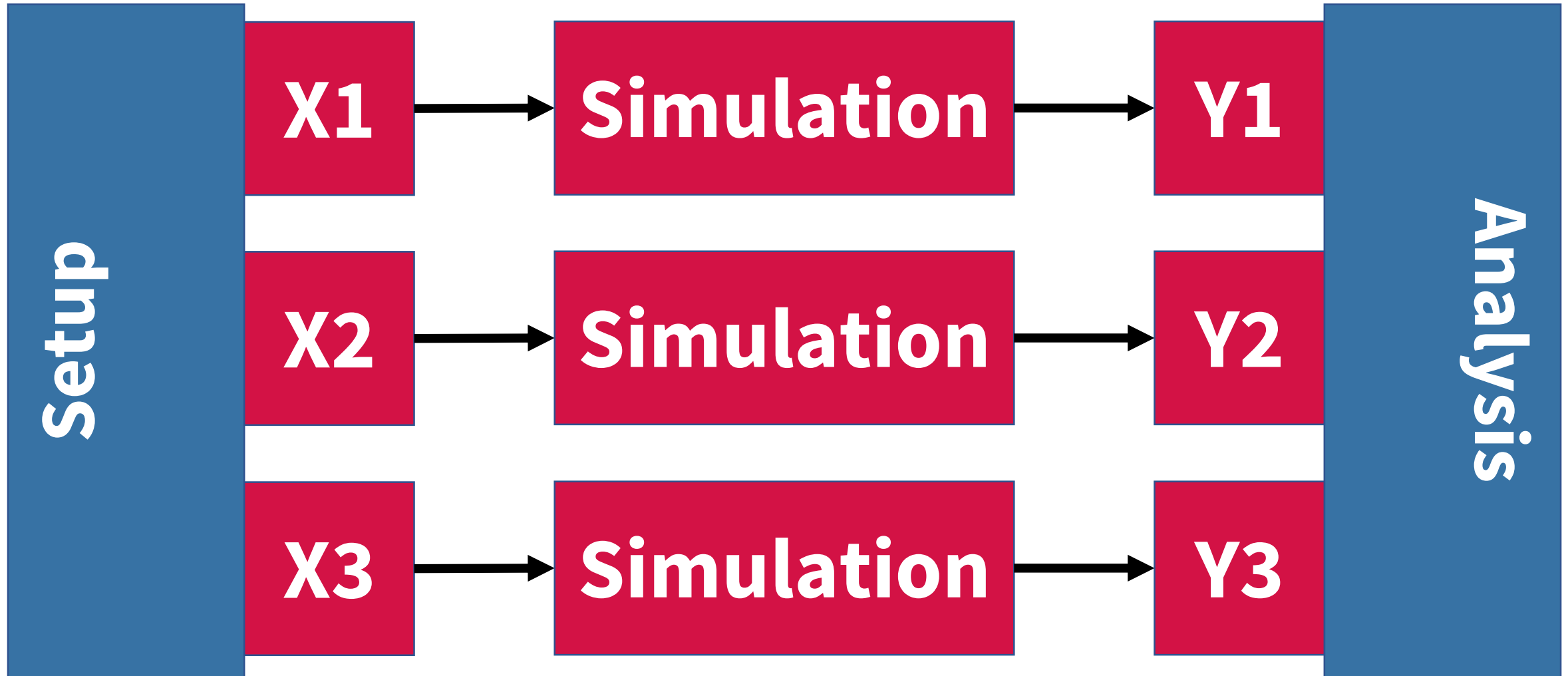


Common Problems in Scientific Computing

What happens to Y as we change X?



What happens to Y as we change X?



```
X = [0, 1, 2, ...]
```

```
Y = map(simulation, X)
```

```
make_plot(X, Y)
```

HTMap is a

**Pure-Python,
Seamless,
Lightweight,
Focused**

HTCondor
Job Submitter & Manager

Who is HTMap for?

Users

Has a working
computation written in
Python

Knows Scientific Python,
but not necessarily
anything else


Wants to use high-
throughput computing...
but is **very busy**

Facilitators

“Well, it works on **my
laptop...**”

Users have **similar workflows,**
but **dissimilar skills**

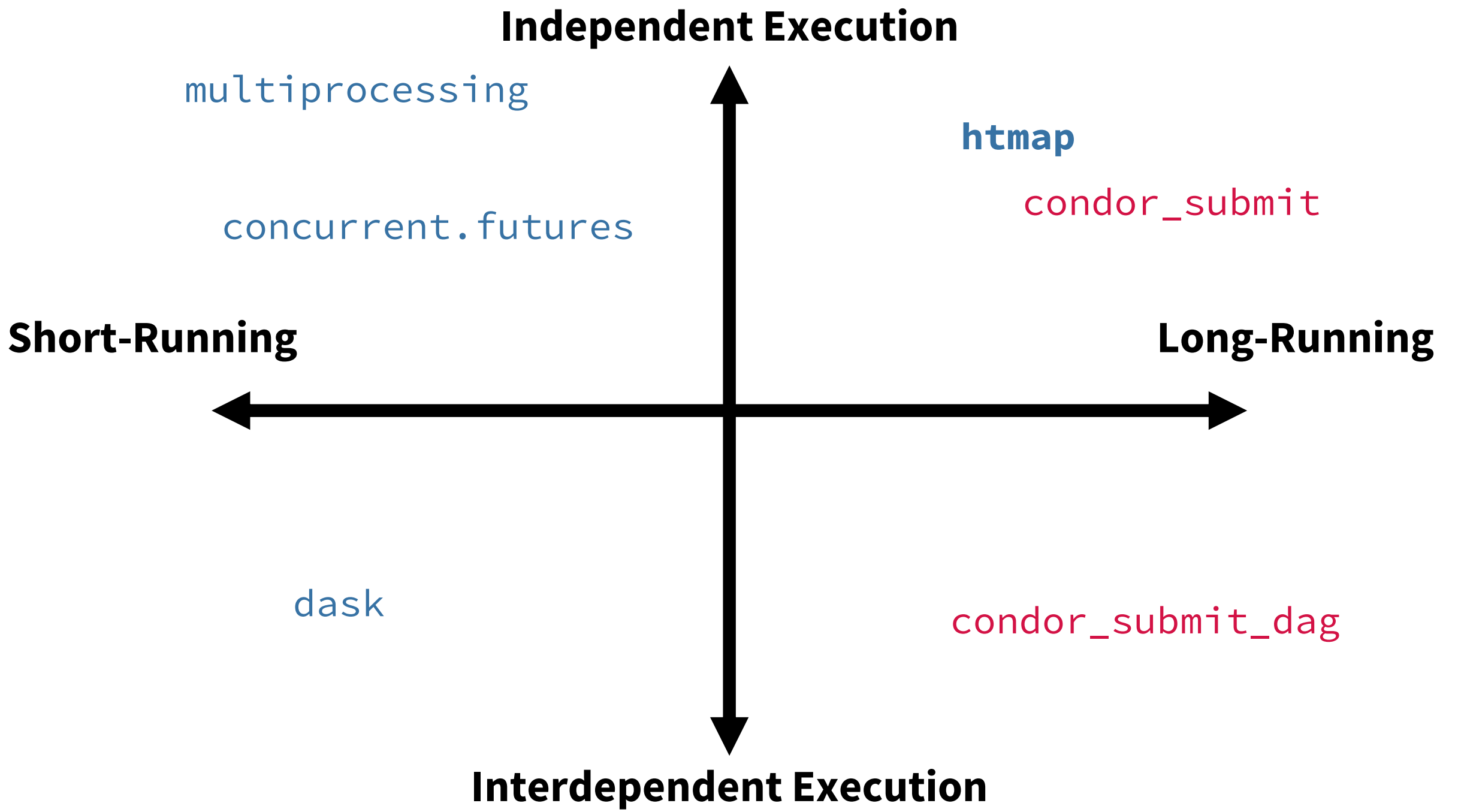
Who is HTMap **NOT** for?



“The output of my analysis is a file”

“My function takes a millisecond to run”

“But I don’t use Python...”



HTMap

<https://github.com/htcondor/htmap>

Slides and Code

<https://github.com/JoshKarpel/htcondor-week-htmap-talk>