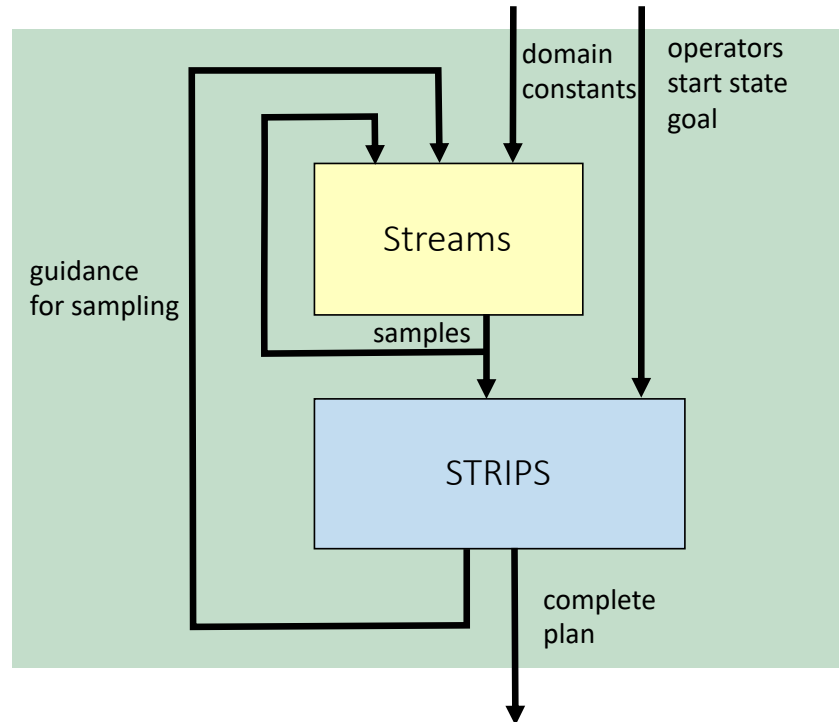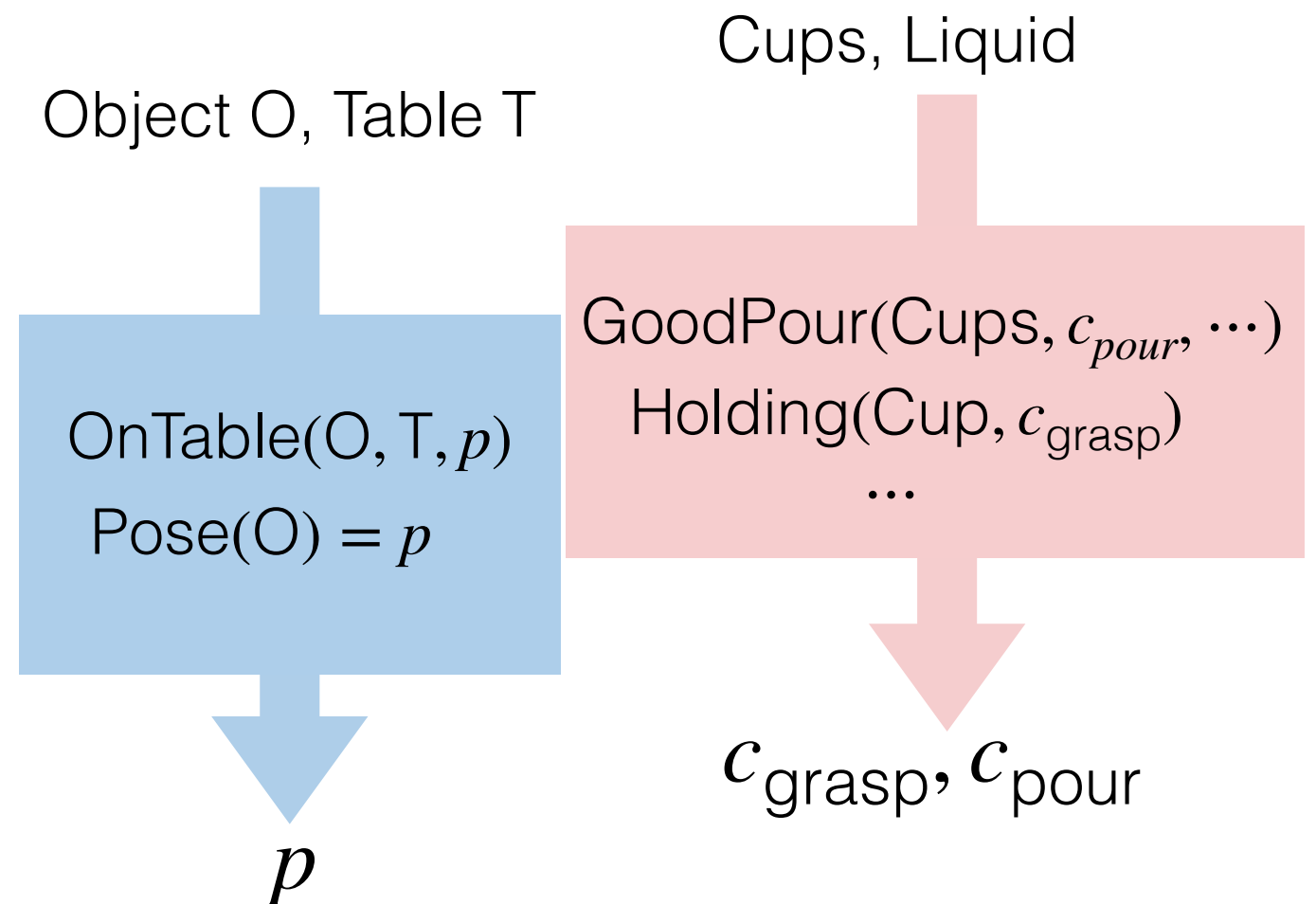# Planning with Stripstream in hybrid spaces

[Garrett, Lozano-Perez, Kaelbling, RSS 2017]

Iterative sample-based reduction to STRIPS
- Can use any PDDL planner implementation without modification
- Incrementally increase universe via sampling in appropriate spaces

- potentially infinite samples
- may be conditioned on a discrete or continuous typed input value
- constraint guaranteed to hold between input and output

Object O, Table T

$$\text{OnTable}(O, T, p)$$
$$\text{Pose}(O) = p$$

p

Cups, Liquid

$$\text{GoodPour}(\text{Cups}, c_{pour}, \cdots)$$
$$\text{Holding}(\text{Cup}, c_{\text{grasp}})$$
$$\cdots$$

$c_{\text{grasp}}, c_{\text{pour}}$

Preliminary results