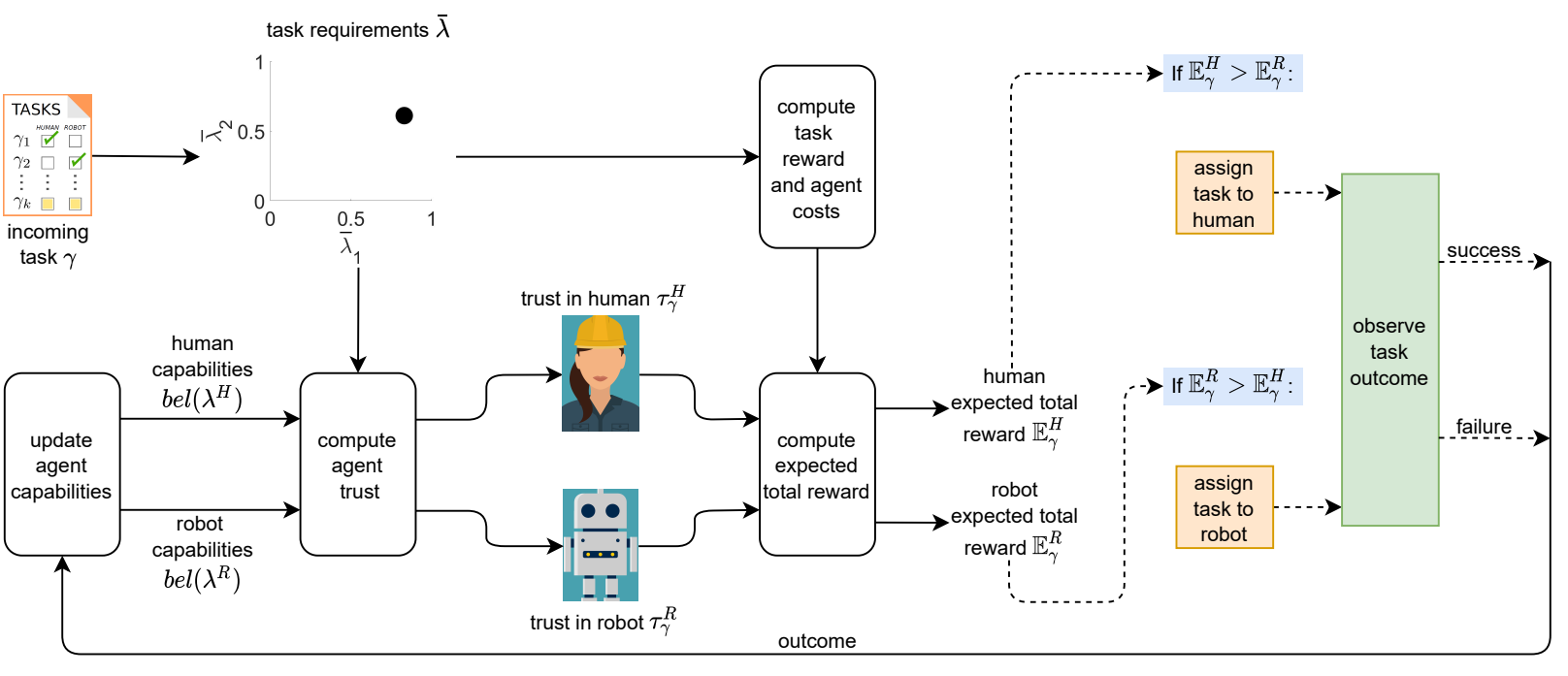
task requirements $\bar{\lambda}$
TASKS
HUMAN
ROBOT
γ_1
γ_2
γ_k
incoming task γ
1
0.5
0
0
0.5
1
$\bar{\lambda}_2$
$\bar{\lambda}_1$
compute task reward and agent costs
If $\mathbb{E}_\gamma^H > \mathbb{E}_\gamma^R$:
assign task to human
success
observe task outcome
failure
If $\mathbb{E}_\gamma^R > \mathbb{E}_\gamma^H$:
assign task to robot
trust in human τ_γ^H
human capabilities $bel(\lambda^H)$
update agent capabilities
compute agent trust
compute expected total reward
human expected total reward $\mathbb{E}_\gamma^H$
robot expected total reward $\mathbb{E}_\gamma^R$
robot capabilities $bel(\lambda^R)$
trust in robot τ_γ^R
outcome