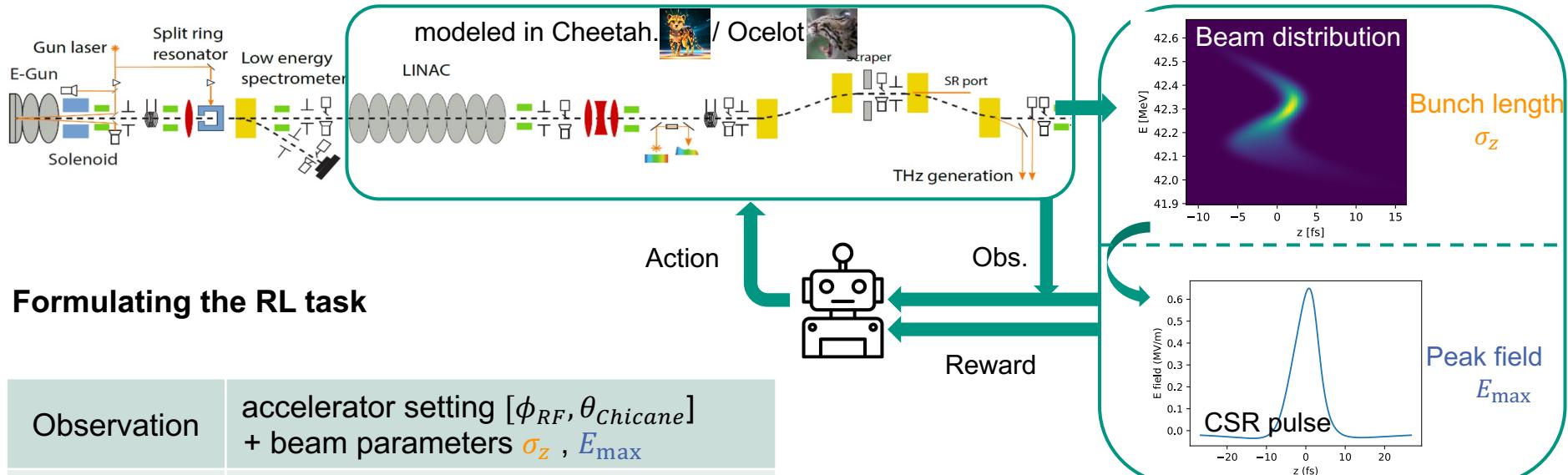


Using Reinforcement Learning for CSR radiation optimization at a Linac



Formulating the RL task

Observation	accelerator setting $[\phi_{RF}, \theta_{Chicane}]$ + beam parameters σ_z , E_{max}
Action	$\Delta[\phi_{RF}, \theta_{Chicane}]$
Reward	<ul style="list-style-type: none">Bunch length: $\text{elu}(\sigma_{threshold} - \sigma_z)$CSR field: E_{max}

PPO agent
trained in SB3

