Non-contact control of a floating object via environmental manipulation

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The System

- Circular water container actuated centrally
The System

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• Floating foam disc

• Capillary interactions → macroscopic behaviours
The System

- Circular water container actuated centrally
- Floating foam disc
- Capillary interactions → macroscopic behaviours
The Difficulties

- Underactuation, inertial effects
- Bifurcations, turbulence, limited repeatability
Bayesian Optimisation
Reinforcement Learning

Agent 1000

Agent 3000

Agent 5000
Reinforcement Learning

Agent 1000

Agent 3000

Agent 5000
Solution Transferability

Changes in morphology shift behavioural boundaries
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