

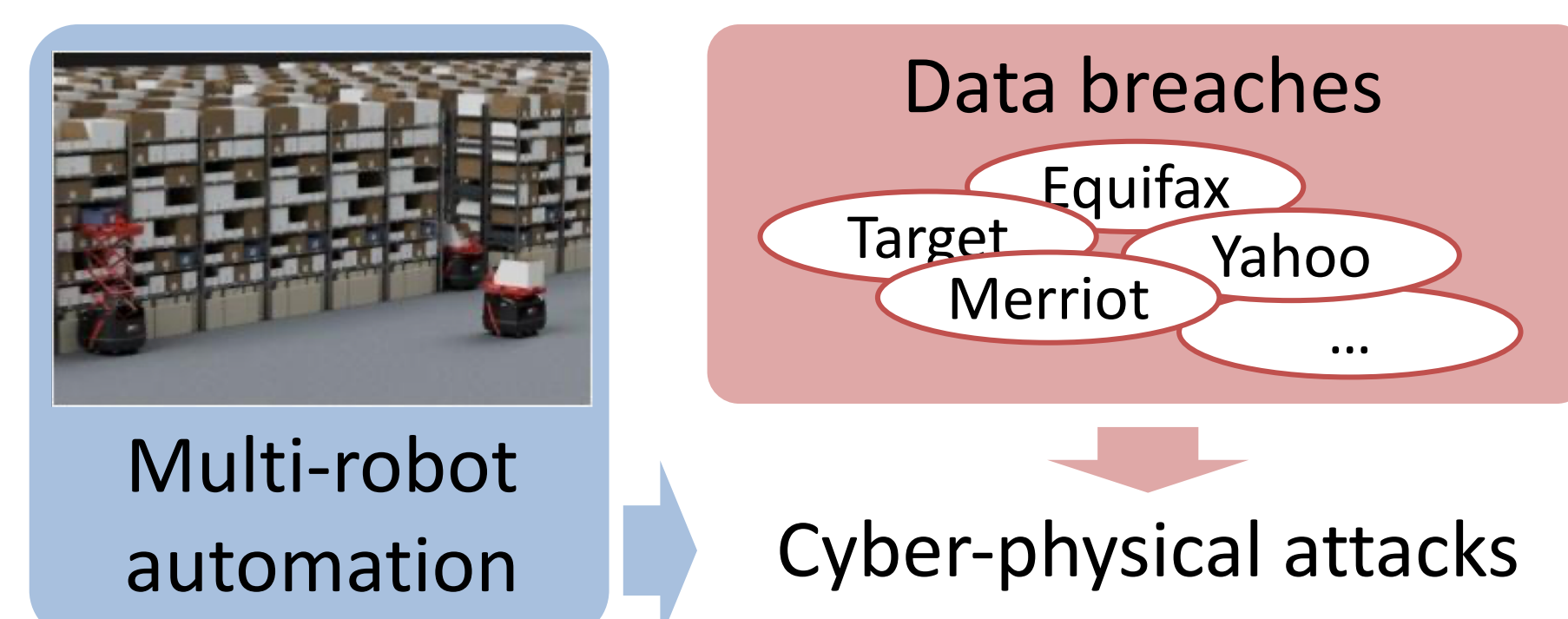
Multiagent Physical Cognition and Control Synthesis Against Cyber Attacks

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Challenge

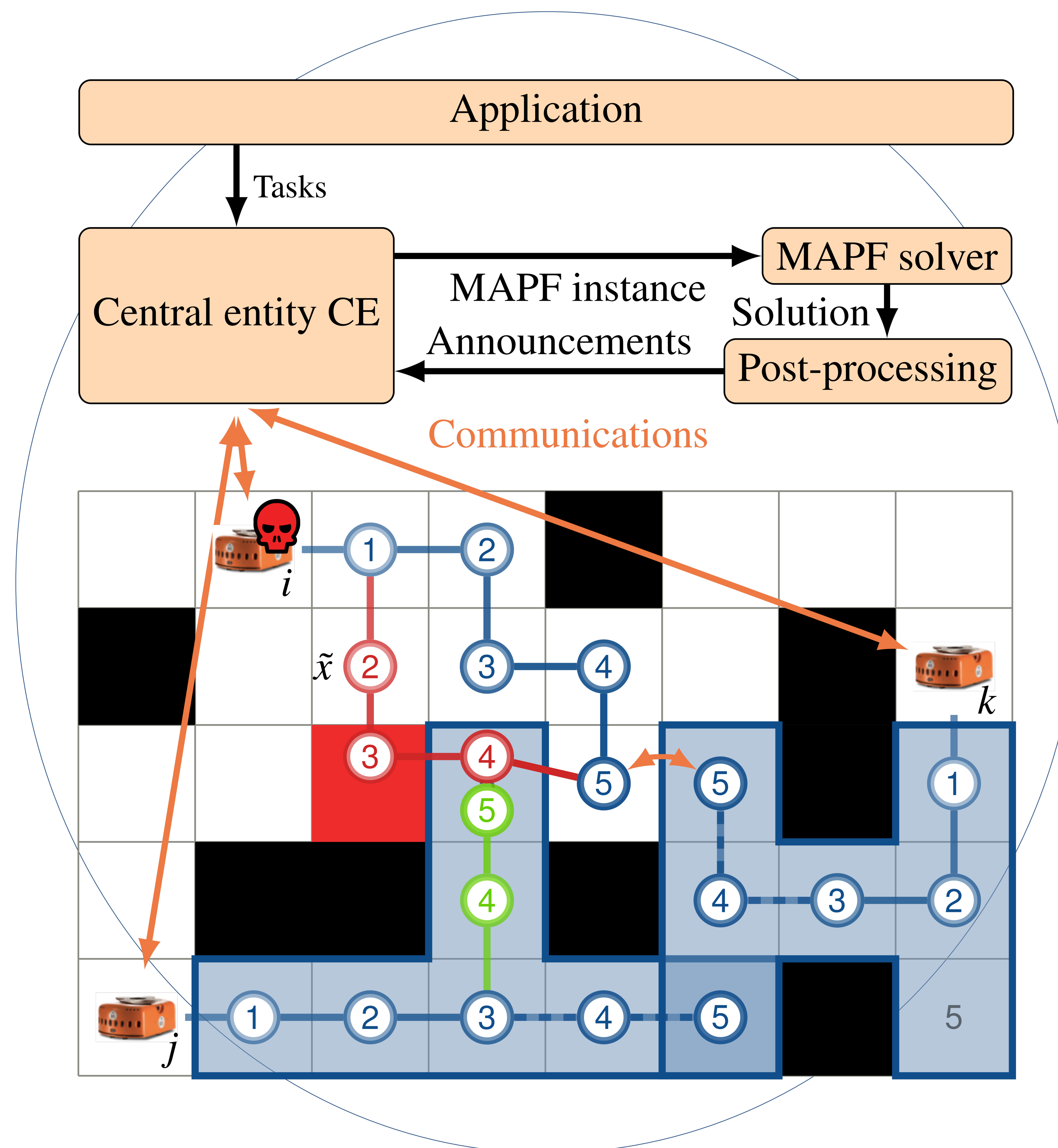
Cyber-physical attacks on networked robots



Solution

Planning: enforce attack detection via co-observation schedule

Horizon limiting announcements: limit information to attacker



Scientific Impact

New security layer that is tailored to the characteristics of CPS systems

Broader Impact

Make automated warehouses safer for humans, avoid loss of productivity

Formal proof of results for some classes of attacks