

UiO : **Department of Technology Systems**  
University of Oslo

**ITS master thesis proposals**

**Cybernetics and autonomous systems: Multi-agent systems**

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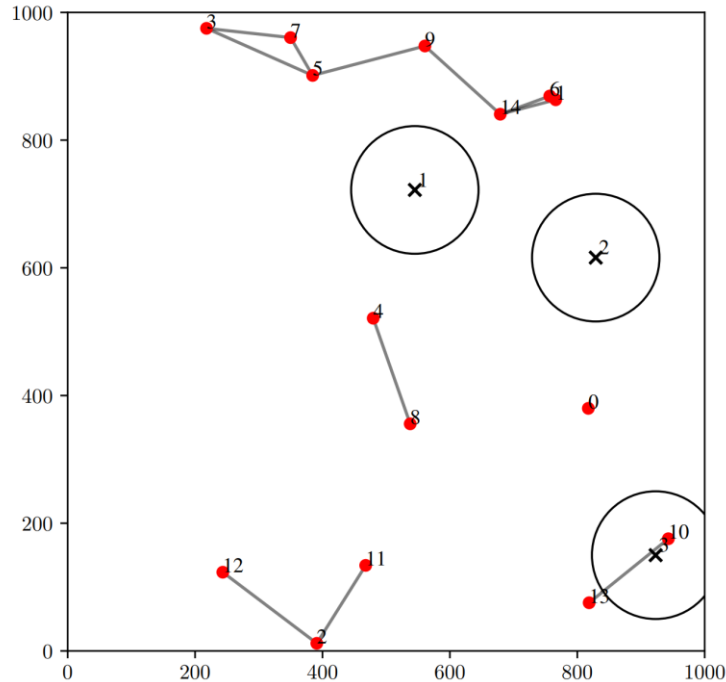
ITS 26 October 2022



# Thesis proposals in multi-agent systems

1. Quorum sensing in multi-robot systems
  - Long or short thesis
  - Simulation and/or physical experiments for analysis
  
2. Analysis of human avatars in multi-agent systems
  - Long thesis
  - Human/swarm-interaction with online recruitment

# Analysing multi-agent systems



- Multi-robot systems can be evaluated in benchmark search and task allocation problems (STAP\*)
- Analyzing different cooperation mechanisms
  - In simulated STAP
  - In experimental STAP lab

\*Minos-Stensrud *et al.*, "Information sharing in multi-agent STAP," IEEE SSCI, 2021

## Summary

- Focus on multi-agent system research
- Experimental or theoretical
- Long or short thesis
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