Research Areas of Interest

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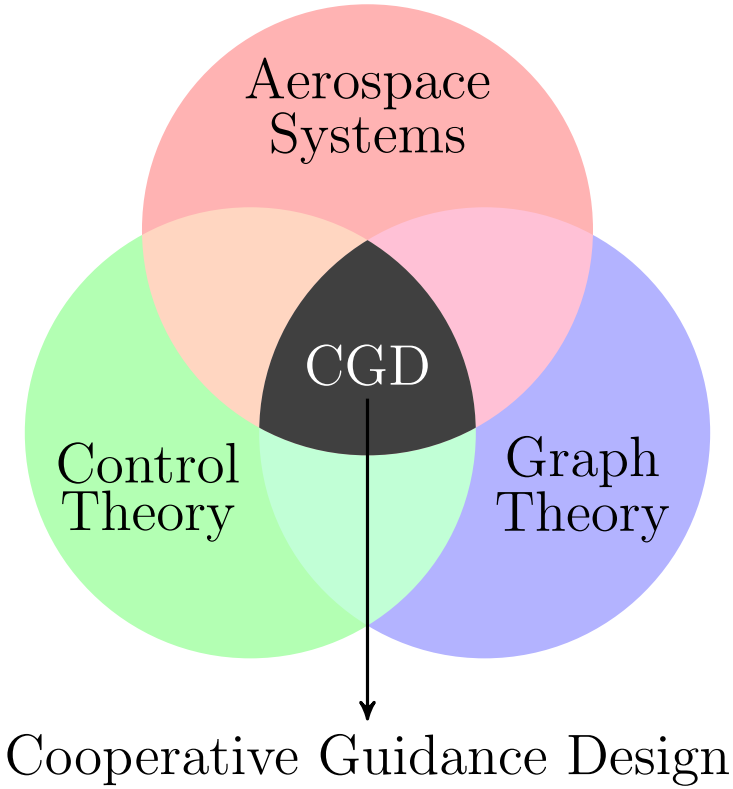
Research Areas of Interest

The Lady, The Bandit and The Bodyguard

- ⇒ Cooperative pursuit and evasion
- ⇒ Three-body problems
- ⇒ Swarm of adversaries
- ⇒ Geometric approach



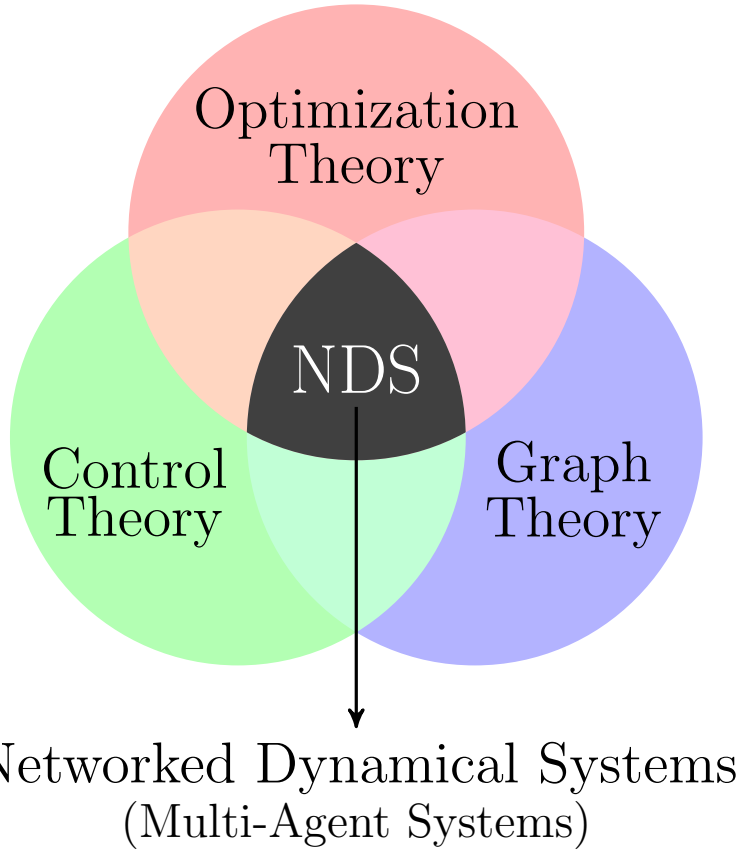
Research Areas of Interest

Multi-Agent Systems

- ⇒ Finite-time consensus
- ⇒ Formation control

Interceptor Guidance

- ⇒ Impact time problems
- ⇒ Impact angle problems
- ⇒ Field-of-view (FOV) constraints
- ⇒ Cooperative salvo interception
- ⇒ Planar and 3D engagements



Research Areas of Interest

Civilian Applications of UAVs

- ⇒ Search and rescue missions
- ⇒ Surveillance/boundary tracking
- ⇒ UAVs patrolling and platooning
- ⇒ Aerial refuelling

Cooperative Control of UAVs

- ⇒ Trajectory planning/following
- ⇒ Obstacle/collision avoidance
- ⇒ Target encirclement and circumnavigation
- ⇒ Boundary detection and tracking

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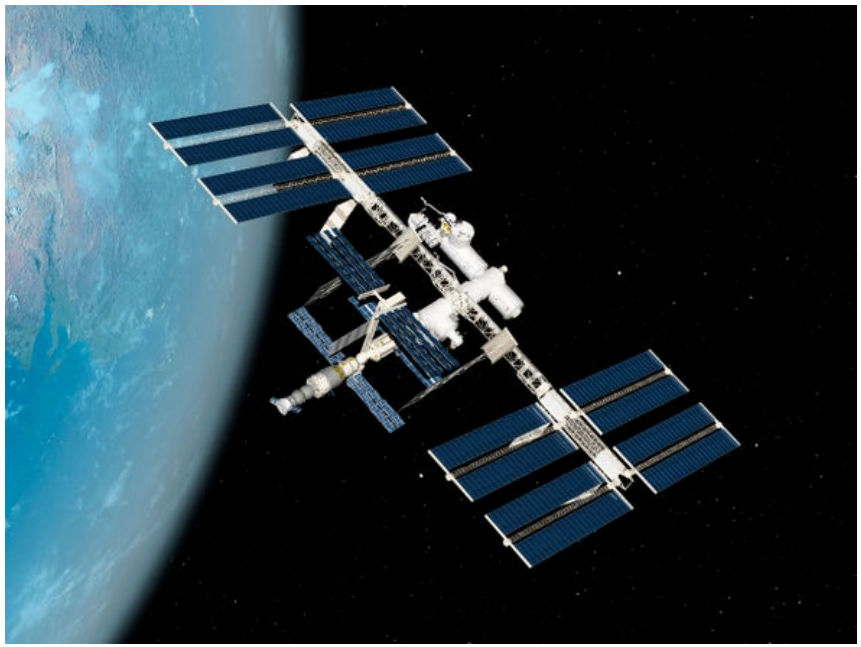

Space Applications

- ⇒ Orbit maintainance
- ⇒ Rendezvous and docking
- ⇒ Attitude control and synchronization

Fault Tolerant Control

- ⇒ Fault detection and diagnosis
- ⇒ Control of damaged aircraft
- ⇒ Gas turbine engine control