



Implementation of an Adaptive Model Predictive Controller for satellite formation flying (Master Thesis)

NetSat is a satellite formation flying mission currently under development for demonstrating autonomous satellite formations. Various formation controllers are currently under development and will be tested on flight.

Tasks

- Understanding the formulation of an MPC formation controller
- Understanding the various non-linearities of a local orbital system and the prediction errors stemming from a linear control model
- Formulation of an Adaptive MPC controller insensitive to prediction errors (MATLAB / Java)

Required Previous Knowledge

Background in control theory, astrodynamics, Java, MATLAB

Language

English

Contact

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