



Comparison of Computationally Efficient Kalman Filters for Attitude Determination of CubeSats (Master Thesis/ Practical)

TOM is an Earth Observation mission with high requirements in attitude determination. Recently developed Kalman filters for attitude estimation based on gyroscopes, sun sensors and magnetic field measurements shall be researched and selected algorithms compared.

Tasks

- Research of recently developed Kalman Filter variations
- Implementation of selected algorithms (in Java, Matlab, or C)
- Comparison of computation efficiency vs. accuracy

Required Previous Knowledge

Background in Kalman Filters (Robotics II),
programming skills (Java, Matlab or C)

Language

German or English

Contact

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