

# **Attitude Determination of Spacecraft Using FOAM and Kalman Filtering**

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## **Abstract**

The attitude determination of a spacecraft has attracted the attention of many researchers over the years. Attitude determination is a crucial part in implementation of reliable control systems for spacecraft. Attitude determination algorithms are broadly classified into two classes, deterministic algorithms and recursive estimation algorithms [12]. This paper aims to advantageously combine these two algorithms FOAM (a deterministic algorithm) and Kalman filtering (a recursive estimation algorithm) to give a more accurate estimate of spacecraft attitude by overcoming inherent sensor errors.