# Article information:

A review of uncertainty propagation in orbital mechanics | Elsevier Enhanced Reader
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# Article summary:

1. This article reviews the existing linear and nonlinear uncertainty propagators used in orbital mechanics, as well as their associated applications.

2. It discusses the advantages and drawbacks of different methods, and potential directions for future efforts.

3. It also provides an overview of theory preliminaries related to uncertainty propagation in space situational awareness related missions.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy, providing a comprehensive overview of the existing linear and nonlinear uncertainty propagators used in orbital mechanics, as well as their associated applications. The author has provided a detailed discussion on the advantages and drawbacks of different methods, and potential directions for future efforts. Furthermore, it also provides an overview of theory preliminaries related to uncertainty propagation in space situational awareness related missions.

The article does not appear to be biased or one-sided, presenting both sides equally with no promotional content or partiality. All claims are supported by evidence from relevant sources, while possible risks are noted where applicable. The only issue is that some counterarguments may have been unexplored or missing points of consideration may have been overlooked; however this does not detract from the overall reliability of the article.

# Topics for further research:

* Space Situational Awareness Uncertainty Propagation
* Monte Carlo Simulation for Orbital Mechanics
* Robust Estimation for Spacecraft Navigation
* Nonlinear Estimation Techniques for Spacecraft Dynamics
* Kalman Filtering for Spacecraft Attitude Estimation
* Gaussian Process Regression for Spacecraft Trajectory Optimization

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