

## The Astroparticle Physics Conference 34th International Cosmic Ray Conference July 30 - August 6, 2015

The Hague, The Netherlands

Contribution ID: 1119 Type: Oral contribution

## **Propagation Times of Jovian Electrons**

Friday, 31 July 2015 12:15 (15 minutes)

Although the main processes are well known, the transport of charged particles in the inner heliosphere is still under investigation. Because of a GPU-accelerated algorithm to solve Parker's transport equation by means of stochastic differential equations (SDEs), our newly developed code offers the possibility to perform extensive parameter studies. In this study we use counting rates of low-MeV electrons originating from the Jovian magnetosphere, measured by various spacecraft, to compare our simulation results with. We present the propagation times and also compare energy spectra and counting rates with spacecraft data in the ecliptic.

## Collaboration

- not specified -

## Registration number following "ICRC2015-I/"

906

**Primary author:** Mr VOGT, Adrian (University of Kiel)

Co-authors: Dr KOPP, Andreas (University of Kiel); Prof. HEBER, Bernd (University of Kiel); KÜHL, Patrick

(University of Kiel); Dr DUNZLAFF, Phillip (University of Kiel)

Presenter: Mr VOGT, Adrian (University of Kiel)

Session Classification: Parallel SH 02 Outer Helio

Track Classification: SH-TH