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Type: **Poster Presentation**

Simulation of Electron Dynamics in the Earth's Magnetosphere

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Abstract content
 (Max 300 words)

The dynamics of electrons with energies from hundreds of keV to tens of MeV were simulated in a dipole magnetic field. A uniform convection electric field was superimposed. Energetic electrons can be injected into the inner magnetosphere around midnight at the onset of the substorm expansion phase. These electrons proceed to drift eastward towards dawn. Energy dispersion is expected because of their different drift velocities. The model was used to simulate the evolution of the energy, radial distance (L shell) and pitch angle distribution function with local time. The results of the simulations are compared to experimental observations from geosynchronous satellites.

Apply to be
 considered for a student
 award (Yes / No)?

yes

Level for award
 (Hons, MSc,
 PhD)?

PhD

Main supervisor (name and email)
and his / her institution

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Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

yes

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