AAPPS-DPP 2018 Plenary speaker Name: Prof. Daniel Baker
Affiliation: Laboratory for Atmospheric and Space Physics, University of Colorado

Rationale: As the particles and waves interaction is a very important topic in Space and universe, I hope that he can give an overview about it by combining observations and simulations. I also note that recently the Japanese ERASE mission has good new results on it published in Nature.

Talk Title: Overview of interaction of particles and waves in magnetosphere by observations and simulations

List of related published papers

1. Baker, D. N. *et al. An extreme distortion of the Van Allen belt arising from the 'Hallowe'en' solar storm in 2003*. *Nature* **432**, 878–881 (2004)

2. Baker, D. N. *et al. A long-lived relativistic electron storage ring embedded in Earth's outer Van Allen belt*. *Science* **340**, 186–190 (2013)

3. Baker, D. N. *et al.* An impenetrable barrier to ultrarelativistic electrons in the Van Allen radiation belts, *Nature* **volume515**, pages531–534 (2014)