报告题目：**Highlights from the MMS Mission**

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时间：2019年7月10日上午10:00

地点：九章大厦A0709.

摘要：NASA’s Magnetospheric Multiscale (MMS) mission was launched in 2015 to study the small-scale dynamics of near-Earth collision-less plasmas. It was specifically designed for studying the microphysics of magnetic reconnection, thanks to four identical spacecraft with very small inter-spacecraft separations (down to 7 km) and very fast measurements of the three-dimensional distribution functions of particles (down to 30 ms for electrons, a factor 100 faster than previous missions). I will highlight a few of the main findings by the MMS mission, focusing in particular on the fine scale dynamics of electrons in the vicinity of the reconnection region.

报告人简介：Dr. Benoit Lavraud received his PhD from the University of Toulouse (France), at the “Institut de Recherche en Astrophysique et Planétologie” (IRAP). He then went to Los Alamos National Laboratory (USA) as a postdoc, starting in February 2004, where he became Staff Member in August 2006. He was PI or Co-I of several grants from NASA/NSF/Los Alamos programs. In January 2008, he became CNRS Permanent Researcher at IRAP (Toulouse, France). Since 2019, he is CNRS Research Director, still at IRAP. He is an expert in solar wind and magnetospheric physics, including instrument developments. He has worked primarily on understanding plasma physics processes related to CMEs and their geo-impact, with an emphasis on the role of the magnetic reconnection process in Solar – Terrestrial interactions. He is Head of the Department "Planets, Environment, and Space Plasmas" at IRAP. He has published over 220 papers in the peer-reviewed literature (h-index of 37). He has been Editor for AGU's Geophysical Research Letters from 2010 to 2017. He has worked on the definition of numerous space missions, as well as particle instrument designs. He has also worked on the development on various tools (e.g., Propagation and Space Weather tools). He has been involved in various international science projects, and has organized or convened numerous sessions in international conferences and workshop. He has supervised many postdocs and graduate/undergraduate students.