NCU-GISS 國立中央大學太空科學研究所 Graduate Institute of Space Science

專題演講

Evolution of Magnetic Fields Associated with Solar Eruptions

Speaker： **Prof. Haimin Wang,**

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Time： 106 年 4 月 11 日 星期二 10:00

Place： 健雄館(科四館) S4-811 教室

摘 要/Abstract：

I will review the studies of solar magnetic field evolution in active regions and its relationship to solar flares. It covers two aspects, the magnetic structure and evolution leading to solar eruptions and the rapid changes of photospheric magnetic field associated with eruptions. For the first topic, we describe the magnetic complexity, new flux emergence, flux cancellation, shear motions, sunspot rotation, and magnetic helicity injection, which may all contribute to the storage and buildup of energy and triggering of solar eruptions. For the second topic, we concentrate on the observations of rapid and irreversible changes of photospheric magnetic field associated with flares, and the implication on the restructuring of three-dimensional magnetic field. In particular, we emphasize the recent advances in observations of photospheric magnetic field, as state-of-the-art observing facilities (such as Hinode and Solar Dynamic Observatory) became available. Especially, the observations from 1.6m New Solar Telescope at Big Bear provide new findings and understanding of this research area. The linkage between observations and theories and future prospective in this research area are also discussed.

※歡迎聽講※

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