

International Workshop

"Explosive Phenomena in Magnetized Plasmas - New Developments in Reconnection Research"

2004 Mar. 17 - 19

Yukawa Institute for Theoretical Physics,
Kyoto University (Kyoto, Japan)

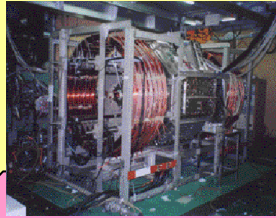
<http://www.kwasan.kyoto-u.ac.jp/reconnection2004>

An aurora: The Earth



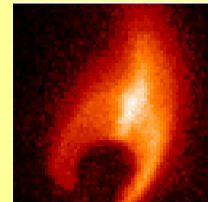
Observations of
the micro processes

Reconnection



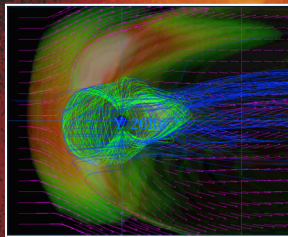
Laboratory experiments
and observations

A flare : The Sun



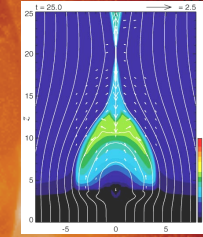
Observations of
the macro features

A simulation of
the Earth's magnetosphere



Theory and simulations

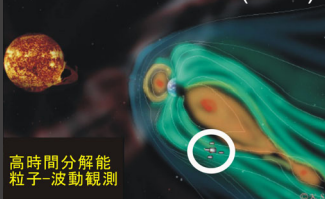
A simulation of
a solar flare



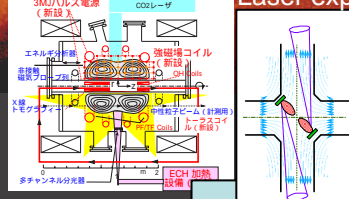
To investigate

- The origin of anomalous resistivity
- The particle acceleration mechanism
- The role of magnetic helicity
- The plasmoid and the shock wave

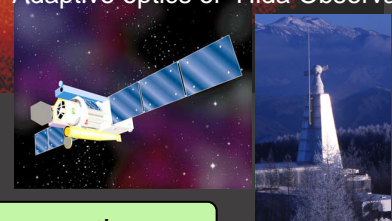
SCOPE mission (2010)



Merging spheromaks and
Laser experiment



Solar-B mission(2006)
Adaptive optics of Hida Observatory



To solve the mechanisms of magnetic reconnection

- Investigating the nature of the active universe.
- Approaching a complete understanding of the nonequilibrium open system and self-organization.
- Establishing the basis of the engineering applications of magnetohydrodynamics and nuclear fusion experiments

Invited/Key Speakers: Parker, E. N., Yamada, M., Kulsrud, R., Scholer, M., Drake, J., Craig, I., Fuselier, S., Tsuneta, S., Sato, T., Omura, Y., Yoshida, Z., Matsumoto, R., Makishima, K., Takabe, H., Ono, Y., Yoneda, H., Kojima, H., Fujimoto, M., Kusano, K., Shibata, K., Hoshino, M., Ugai, M., Horiuchi, R., Ogino, T., Terasawa T.

Scientific Organizing Committee: K. Shibata (chair), T. Terasawa, M. Hoshino, Y. Ono

Local Organizing Committee: K. Shibata (chair), S. Mineshige, T. Miyagoshi, S. Tanuma T. Yokoyama

Hosts: 21st century COE "Center for Diversity and Universality in Physics" at Kyoto University, Kwasan and Hida Observatories, Yukawa Institute for Theoretical Physics

Contact Address : K. Shibata and T. Miyagoshi, Kwasan Observatory, Kyoto University, Yamashina, Kyoto 607-8471, Japan
tel: +81-75-581-1235 Email: miyagosi@kwasan.kyoto-u.ac.jp