Schedule of Presentations (Updated Wed., May 17)

Monday

Monday AM 1 – Bonsai Room

- 9:00am - James Drake, **The case for interchange reconnection as the driver of the solar wind**
- 9:30am - Masaaki Yamada, **My perspectives of magnetic reconnection research through US-Japan workshops on theory, experiments, and observations**
- 10:00am – Kazunari Shibata and Amitava Bhattacharjee, **Remembrances of Gene Parker**

Monday AM 2 – Bonsai Room

- 11:00am - Alexander Philippov, **Relativistic reconnection in pulsar magnetospheres**
- 11:20am - Lorenzo Sironi, **The universality of particle acceleration in relativistic magnetic reconnection**
- 11:40am - Greg Werner**, Relativistic Magnetic Reconnection in 3D**
- 12:00pm - John Mehlhaff, **Klein-Nishina reconnection: an example of astrophysical QED reconnection**

Monday PM 1 – Bonsai Room

- 2:00pm - Masahiro Hoshino, **Efficiency of Nonthermal Particle Acceleration from Non-relativistic to Relativistic Magnetic Reconnection**
- 2:20pm - Seiji Zenitani, **Plasmoid-dominated turbulent reconnection in symmetric and asymmetric systems**
- 2:40pm - Ryoji Matsumoto, **Magnetic Reconnection in Black Hole Accretion Disks**
- 3:00pm - Kazunari Shibata, **Magnetic Reconnection and Associated Mass Ejections in Solar Flares and Stellar Superflares**

Monday PM 2 – Portola Room

- 3:30-5:30pm - Posters

Tuesday

Tuesday AM 1 – Bonsai Room

8:40am - Colby Haggerty**, Scaling of Asymmetric Relativistic Magnetic Reconnection**

9:00am - Fan Guo, **Are reconnection x-points important for particle injection during nonthermal particle acceleration in relativistic magnetic reconnection?**

9:20am - Joerg Buechner, **Current sheet formation and reconnection in the turbulent plasmas of the Solar atmosphere**

9:40am - Kevin Schoeffler, **Limits on the compression of magnetic islands in strongly radiative magnetic reconnection**

10:00am - Fatima Ebrahimi, **Magnetic reconnection: From compact fusion to plasma propulsion**

Tuesday AM 2 – Bonsai Room

11:00am - Will Fox, **Magnetic Reconnection in Laser-Plasma experiments**

11:20am - Earl Scime, **Non-Maxwellian Electron Velocity Distribution Functions Observed in a Heliospheric-Relevant Reconnection Experiment**

11:40am - Samuel Greess, **Modeling experimental reconnection with multidimensional kinetic simulations**

12:00pm - Jack D. Hare, **Radiatively Cooled Magnetic Reconnection Experiments at the Z Pulsed-Power Facility**

Tuesday PM 1 – Bonsai Room

2:00pm - Hyeon K. Park, **Kruskal-Shafranov limit and Reconnection Time Scale of the Sawtooth Instability in Tokamak Plasmas**

2:20pm - Jongsoo Yoo, **Quantitative analysis on electron heating associated with lower hybrid drift waves**

2:40pm - Hiroshi Tanabe**, Recent progress of guide field reconnection research in merging spherical tokamak formation experiments**

3:00pm - Marit Oieroset, **Scaling of reconnection electron heating in the low Beta and high Alfvén speed regime of Earth's magnetotail**

Tuesday PM 2 – Portola Room

3:30-5:30pm - Posters

Wednesday (Note the updates!!!)

Wednesday AM 1 and AM 2 – Fisherman's Wharf

Excursion, ***optional*** – leave the hotel at 8:20am to go to Monterey Bay Whale Watch at Fisherman's Wharf by 8:30am, returning at about 12:00pm

Wednesday PM 1 – Bonsai Room

2:00pm - Jim Burch, **Dissipation in Magnetopause Reconnection**
2:20pm - Naoki Bessho, **Strong reconnection electric fields, outflow speeds, and particle acceleration in shock-driven reconnection**
2:40pm - Li-Jen Chen, **Magnetic reconnection in the bow shock environment**
3:00pm - Robert Ergun, **Particle Acceleration from Strong Turbulence Driven by Magnetic Reconnection**

Wednesday PM 2 – Bonsai Room

4:00pm - Mike Brown, **Magnetic Reconnection Experiments at SSX**
4:20pm - Mitsuo Oka**, Electron energization and thermal to non-thermal energy partition during earth's magnetotail reconnection**
4:40pm - Julia E. Stawarz, **Turbulence-Driven Reconnection in Earth's Magnetosheath**
5:00pm - Rumi Nakamura, **Observations of reconnection electric field in the Earth's magnetotail**
5:20pm - Amitava Bhattacharjee, **Plasmoid-Mediated Reconnection and Turbulence**

5:50pm Adjourn

Thursday

Thursday AM 1 – Bonsai Room

8:40am - Harry Arnold, **Using Effective Resistivity Maps Inspired by Data Mining for Global MHD Simulations of the Magnetosphere**

9:00am - Xiaocan Li, **Thermal and nonthermal partition in magnetic reconnection**

9:20am - Qile Zhang, **Efficient Nonthermal Ion and Electron Acceleration in 3D Magnetic Reconnection**

9:40am - Yi-Hsin Liu, **First-Principles Theory of the Rate of Magnetic Reconnection**

10:00am - Adam Stanier, **Impact of 3D dynamics on the transition from collisional to kinetic reconnection**

Thursday AM2 – Bonsai Room

11:00am - Jan Egedal, **Role of Electron Pressure Anisotropy in Setting the Structure of the Electron Diffusion Region**

11:20am - Hasan Barbhuiya, **A Novel Measure of Kinetic-Scale Energy Conversion in Magnetic Reconnection - HORNET**

11:40am - Tak Chu Li, **Magnetic reconnection in kinetic turbulent plasmas: identification by magnetic flux transport and three-dimensional properties**

12:00pm - Prayash Pyakurel, **Faster Form of Electron Magnetic Reconnection with a Finite Length X-Line**

Thursday PM 1 – Bonsai Room

2:00pm - Nuno Loureiro, **The onset of magnetic reconnection in collisional and collisionless plasmas**

2:20pm - Subash Adhikari, **Magnetic reconnection as a turbulent cascade**

2:40pm - Bill Matthaeus, **Reconnection and Turbulence**

3:00pm - Muni Zhou, **Intermittency, current sheets, and electron heating in Kinetic-Alfvén-wave turbulence**

Thursday PM 2 – Portola Room

3:30-5:30pm - Posters

Thursday Evening – De Anza Room

7:00-9:00pm - Banquet

Friday

Friday AM 1 – Bonsai Room

8:40am -Lindsay Glesener, **Electron heating and acceleration in solar jets and flares**

9:00am - Jiong Qiu, **Mapping magnetic reconnection and flare energy release in the chromosphere**

9:20am - Anna Tenerani, **"Fractal" reconnection and its spectral signatures**

9:40am - Vanessa Polito, **Investigating the physics of reconnection region in solar flares using UV spectroscopic observations**

10:00am - Silvina Guidoni, **Spectral Single and Double Power-law Formation by Sequential Particle Acceleration in Flare Magnetic Islands**

Friday AM 2 – Bonsai Room

11:00am -Bin Chen, **Radio Diagnostics of Magnetic Reconnection and Energetic Electrons in Solar Flares**

11:20am - Joel Dahlin, **Explosive Energy Release in Solar Flares**

11:40am - J. L. Verniero, **Tracing the cosmic energy flow with Parker Solar Probe magnetic reconnection events associated with the Heliospheric Current Sheet**

12:00pm - James Klimchuk, **The Role of 3D Complexity in Magnetic Reconnection**

Friday PM 1 – Bonsai Room

2:00pm - Fulvia Pucci, **Reconnection in Protoplanetary Disks**

2:20pm - Radoslav Bucik, **3He-Rich Solar Energetic Particles: Solar Sources**

2:40pm - Dana Longcope, **Releasing magnetic energy by reconnecting flux: how, why and how much?**

3:30pm Workshop Adjourned

Posters

1. Andrei Afanasev, Yuhong Fan (HAO/NCAR), Maria Kazachenko (LASP/CU Boulder), Mark Cheung (LMSAL), **Hybrid data-driven magnetofrictional and MHD simulations of an eruptive solar active region**

2. Jeffersson Agudelo, Daniel Verscharen (Mullard Space Science Laboratory, UCL), Robert T. Wicks (Department of Mathematics, Physics and Electrical Engineering, Northumbria University), Christopher J. Owen (Mullard Space Science Laboratory, UCL), Andrew P. Walsh (European Space Astronomy Centre) and Kai Germaschewski (pace Science Center, University of New Hampshire), **Agyrotropy patterns in 3D small-scale turbulent reconnection**

3. Spiro K Antiochos, James E. Leake (NASA/GSFC), Mark G. Linton (NRL), **The Role of Reconnection in Eruption Onset**

4. Milton Arencibia, P. A. Cassak (West Virginia University), M. A. Shay (University of Delaware), Jiong Qiu (Montana State University), Steven Petrinec (Lockheed Martin ATC), Haoming Liang (University of Alabama in Huntsville), **Scaling Theory of 3D Magnetic Reconnection Spreading**

5. Kendra Bergstedt, Hantao Ji, Princeton University and PPPL, **Machine Learning Algorithms for Detection of Plasmoids in Multiple-X-Line Collisionless Reconnection Regions**

6. Sayak Bose, Will Fox (PPPL), Hantao Ji (PPPL, Princeton University), Jongsoo Yoo (PPPL), Aaron Goodman (Princeton University), Andy Alt (Princeton University), and Masaaki Yamada (PPPL), **Study of energization of electrons and ions during fast guide field magnetic reconnection in MRX**

7. Bryce Cannon, **Deriving Magnetic Reconnection Rate in the M6.5 Flare on 2015 June 22 2015 With Highest Spatial Resolution**

8. Paul Cassak, M. Hasan Barbhuiya, Haoming Liang, and Matthew Argall, **A Generalization of First law of Thermodynamics and Applications to Reconnection**

9. Giulia Cozzani, Yu. V. Khotyaintsev (IRF, Uppsala, Sweden), D. B. Graham (IRF, Uppsala, Sweden), J. Egedal (University of Wisconsin-Madison, Madison, Wisconsin, USA), M. André (IRF, Uppsala, Sweden), A. Vaivads (KTH, Stockholm, Sweden), A. Alexandrova (LPP, Palaiseau, France), O. Le Contel (LPP, Palaiseau, France), R. Nakamura (Space Research Institute, Austrian Academy of Sciences, Graz, Austria), S. A. Fuselier (SwRI, San Antonio, Texas, USA), C. T. Russell (UCLA, Los Angeles, California, USA) and J. L. Burch (SwRI, San Antonio, Texas, USA), the Vlasiator Team (Urs Ganse, Yann Pfau-Kempf, Markku Alho, Ivan Zaitsev, Jonas Suni, Maxime Grandin, Lucile Turc, Markus Battarbee, Maarja Bussov, Maxime Dubart, Harriet George, Konstantinos Horaites, Konstantinos Papadakis, Vertti Tarvus, Honyang Zhou) (Department of Physics, University of Helsinki, Helsinki, Finland) and Minna Palmroth (Department of Physics, University of Helsinki,

Helsinki, Finland), **Interplay between magnetic reconnection and flapping instabilities in the magnetotail at different scales: MMS observations and global hybrid-Vlasov simulations**

10. Benjamin Crinquand, **Magnetic reconnection in black-hole magnetospheres**

11. Lars K. S. Daldorff, J. E. Leake (NASA) and J. A. Klimchuk (NASA), **Implication of line tied magnetic field on magnetic reconnection in the closed corona**

12. Richard E Denton, Yi-Hsin Liu (Dartmouth College), Hiroshi Hasegawa (JAXA), Roy Torbert (UNH), **Recent developments in reconstruction of the magnetic field observed by spacecraft**

13. Senbei Du, **Onset of Magnetic Reconnection at the Heliospheric Current Sheet**

14. Anna Fitzmaurice, James Drake, UMCP, Marc Swisdak, UMCP, **Investigating Helium-3 Acceleration in Solar Flares due to Reconnection-related Plasma Instabilities**

15. Omar French, (Fan Guo, LANL), (Qile Zhang, LANL), (Dmitri Uzdensky, University of Colorado, Boulder), **Particle Injection and Nonthermal Particle Acceleration in Relativistic Magnetic Reconnection**

16. Alisa Galishnikova, Eliot Quataert (Princeton University), Alexander Philippov (Flatiron Institute), **Collisionless black hole accretion**

17. Paul Gradney, Jan Egedal, **Reconnection Drive Cylinder for the Terrestrial Reconnection Experiment**

18. Hayk Hakobyan, Sasha Philippov (Flatiron Institute, NY), Anatoly Spitkovsky (Princeton University, USA), **Energy dissipation and gamma-ray emission in young pulsars**

19. Michael Hesse, Jim Burch, Yi-Hsin Liu, Naoki Bessho, Susanne Spinnangr, Håkon Kolstø, Cecilia Norgren, **A new look at the EDR is asymmetric guide-field reconnection**

20. Ritoku Horiuchi, T. Moritaka (NIFS), S. Usami (NIFS), and Y. Ono (Tokyo Univ.), **Formation of a hollow magnetic pressure profile by merging of two spherical-tokamak-type plasmoids**

21. Hantao Ji, A. Alt, K. Bergstedt, S. Bose, W. Daughton, W. Fox, A. Goodman, A. Le, S. Majeski, A. Stanier, J. Yamada, J. Yoo, and the FLARE team, **Phase Transition, Multiscale Magnetic Reconnection, and the FLARE Project**

22. Haakon Midthun Kolstoe, **MMS Observations of an Expanding Oxygen Wave in Magnetic Reconnection**

23. Dingyun Liu, William Fox, Sayak Bose, Zheng Yan, George McKee, Stephen Jardin, Hantao Ji, Yilun Zhu, Guanying Yu, **Investigation of magnetic reconnection during sawtooth crashes through local plasma density and temperature diagnostics in DIII-D***

24. Zhuo Liu, **Ion-acoustic turbulence and its impact on magnetic reconnection onset**

25. Benjamin Lynch, N. M. Viall (GSFC/NASA), A. K. Higginson (GSFC/NASA), L. Zhao (CLaSP/UM), S. T. Lepri (CLaSP/UM), X. Sun (IfA/UH), **The S-Web Origin of Heavy Ion Composition Enhancement in the Slow Solar Wind**

26. Stephen Majeski, Hantao Ji, Princeton University, **On the Role of Plasmoid Size and Structure in Fermi Acceleration During Multiscale Reconnection**

27. Alex Millet-Ayala, **Use of multiple high frequency Bdot probes to characterize null points in the Terrestrial Reconnection EXperiment (TREX)**

28. Yasushi Ono, H. Tanaka, S. Takeda, R. Someya, M. Akimitsu, M. Akimitsu, K. Doi, H. Tanabe, R. Horiuchi, S. Usami, C. Z. Cheng, **Reconnection heating study of two merging tokamak plasmas for fusion plasma ignition: its scaling law and intermittent reconnection with plasmoid formation/ ejection**

29. Neha Pathak, Robert E. Ergun (Laboratory for Atmospheric and Space Physics University of Colorado, Boulder), **Generation of Turbulence Near Reconnection Sites in the Magnetosphere**

30. Yi Qi, Tak Chu Li, University of Maryland, Iowa City, IA, United States, Christopher T Russell, University of California, Los Angeles, CA, United States, Robert E Ergun, Laboratory for Atmospheric and Space Physics, University of Colorado Boulder, Boulder, CO, United States, and Ying-Dong Jia, UCLA-IGPP, Los Angeles, CA, United States, **Magnetic Flux Transport Identi¦cation of Active Reconnection: MMS observations in the Earth's magnetosphere**

31. Ramiz A. Qudsi, Brian Walsh (Boston University), Jeff Broll (Los Alamos National Laboratory), **A comparative study of reconnection X-line predictions on dayside magnetopause of Earth**

32. Michael Shay, Subash Adhikari (Udel), Tulasi Parashar (Victoria University of Wellington), William Matthaeus (Udel), Prayash Pyakurel (Berkeley), Fordin (Udel), Julia Stawarz (Imperial), Jonathan Eastwood (Imperial), **Basic Principles of Energy Cascade During Magnetic Reconnection**

33. Chen Shi, **Linear tearing instability in resistive-MHD current sheet: guide field, normal magnetic field, and plasma flow**

34. Peiyun Shi, Earl Scime, Mahmud Hasan Barbhuiya, and Paul Cassak, **Three-Dimensional Electron Velocity Distribution Function Measurements during Electron-Only Magnetic Reconnection in PHASMA**

35. Jason Shuster, **Temporal, Spatial, and Velocity-Space Gradients of Electron Phase Space Density Measurements at Earth's Reconnecting Magnetopause**

36. Ryo Someya, I. Nakau, Y. Funato, Y. Cai, H. Tanabe, Y. Ono, **Spatial Profile measurement of ion velocity distribution function for studying reconnection heating and acceleration in tokamak merging experiment**

37. Susanne Flø Spinnangr, **Investigating reconnection onset through electron dynamics**

38. Shunsuke Usami

39. Thomas W. O. Varnish, George V. Dowhan (UMich), Akash P. Shah (UMich), Brendan J. Sporer (UMich), Roman Shapovalov (UMich), Nicholas M. Jordan (UMich), Raul F. Melean (UMich), Ryan D. McBride (UMich), Rishabh Datta (MIT), Dylan K. Robinson (MIT) and Jack D. Hare (MIT), **Pulsed-Power Driven Magnetic Reconnection in an Externally-Generated Guide Field**

40. Ivan Vasko, Tai Phan (SSL, UCB), Kaz Alimov (SSL, UCB), Ajay Lotekar (IRF, Uppsala), Stuart Bale (SSL, UCB), Forret Mozer (SSL, UCB), Anton Artemyev (UCLA), **Kinetic-scale current sheets in the solar wind at 0.2 and 1 au: properties, scale-dependent features and necessary reconnection condition**

41. Q. M. Wargnier, Martinez-Sykora (LMSAL-BAERI), Hansteen (BAERI), **Multi-Fluid Multi-Species (MFMS) simulations of magnetic reconnection in the solar chromosphere**

42. Blake Wetherton, Jan Egedal, University of Wisconsin-Madison Ari Le, Los Alamos National Laboratory William Daughton, Los Alamos National Laboratory, **Generation of a strong parallel electric field and embedded electron jet in the exhaust of moderate guide field reconnection**

43. Xiaoyan Xie, Katharine Reeves (Harvard-Smithsonian Center for Astrophysics), **Heating Effects of Supra-arcade Downflows (SADs) on Plasma above Solar Flare Arcades**

44. Zhiyu Yin, **A new method for the simulation of electron and ion acceleration during magnetic reconnection in macroscale systems**

45. Seiji Zenitani, Genta Ueno (Institute of Statistical Mathematics), **Two methods to analyze relativistic kinetic plasmas in magnetic reconnection**

46. Shu Zhang, **Particle Acceleration and Ion and Electron Acoustic Bursts during Anti-Parallel Reconnection Driven by Lasers**

47. Masaaki Yamada, **Pictures from previous MR workshops**

48. Job announcements