Final (v5) agenda for MMS Community Workshop 21-24 October 2019, "Le Bellevue" Congress Center in Biarritz (France)

| | Monday 21 October 2019 | | | |
|----------|------------------------|--|--|--|
| Time Dur | ration | Session | | |
| 08:00 1 | 1h' | REGISTRATION | | |
| 09:00 1h | h30' | HPCA team (Vague 1) EPD team (Vague 2) FIELDS team (Vague 3) | | |
| 10:30 | 30' | Coffee Break | | |
| 11:00 1 | h30' | HPCA team (<i>Vague</i> 1) EPD team (<i>Vague</i> 2) FIELDS team (<i>Vague</i> 3) | | |
| 12:30 2 | 2h' | Lunch time | | |
| 14:30 1h | h30' | Senior Review Committee (<i>Rhune</i> 2) | | |
| 16:00 3 | 30' | Coffee Break | | |
| 16:30 1h | h30' | MMS SWG (Rhune 2) | | |

| Tuesday 22 October 2019 (Room: Rhune 2) | | | | |
|---|----------|--------------------------------|-----------------------|---|
| Time | Duration | Session | Speaker | Title |
| 08:00 | 50' | | | REGISTRATION |
| 08:50 | 10' | | | Inauguration of the meeting (B. Lavraud) |
| 09:00 | 15' | | Justin Holmes | Magnetic compression and nonlinear waves at the reconnection separatrix |
| 09:15 | 15' | Tail | Cecilia Norgren | Electron acceleration and thermalization at magnetotail reconnection separatrices |
| 09:30 | 15' | (B. Lavraud) | Anthony Rogers | Applying Magnetic Curvature to identify thin current sheets relativeto tail reconnection regions |
| 09:45 | 15' | (B. Laviauu) | Gabor Toth | Exploring the Dynamics of Sawtooth Oscillations Using the Global Magnetohydrodynamics with Embedded Particle-in-Cell Model |
| 10:00 | 15' | | Giovanni Lapenta | Reconnection outflows in the magnetotail: comparing MMS crossings with HPC PIC simulations |
| 10:15 | 30' | | | Coffee Break |
| 10:45 | 15' | | Olivier Le Contel | MMS/Cluster joint measurements of plasma sheet boundary layer crossings: a case study |
| 11:00 | 15' | Tail | Richard Denton | Measuring the magnetic structure velocity for the 11 July 2017 magnetotail reconnection event |
| 11:15 | 15' | (C. Norgren) | Sam Bingham | MMS Observations of the Charge Dependent Energization and Drift Trajectory of Ions During Injections in the Earth's Magnetotail |
| 11:30 | 15' | (C. Noigieii) | Evgeny Panov | Broad dipolarization-injection fronts |
| 11:45 | 15' | | Reiner Friedel | Substorm injections as seen by MMS and MANY other satellites |
| 12:00 | 2h | | | Lunch time |
| 14:00 | 15' | | Daniel Baker | Shocks, High Speed Streams, and Sudden Impulses: MMS Studies of Effects on Energetic Particle Properties |
| 14:15 | 15' | | Joseph Fennell | Do ULF Waves Generate Microinjections? |
| 14:30 | 15' | Tail / EDR | Jim Burch | Fine Structure of Magnetopause Electron Diffusion Regions |
| 14:45 | 15' | (R. Kieokaew) | Kevin Genestreti | lon-scale structure of the outer electron diffusion region |
| 15:00 | 15' | | Michael Hesse | Revisiting the structure of the electron diffusion region in asymmetric magnetic reconnection |
| 15:15 | 15' | | Wenya Li | Electron diffusion region of magnetic reconnection with ~0.10 guide field in the magnetotail |
| 15:30 | 30' | | | Coffee Break |
| 16:00 | 15' | EDR (S. Toledo- Redondo) | Alexandra Alexandrova | Electron firehose instability operating in the electron diffusion region |
| 16:15 | 15' | | Kyunghwan Dokgo | High-frequency waves driven by agyrotropic electron distribution |
| 16:30 | 15' | | Roy Torbert | Reconstructions and Dynamics in the External EDR |
| 16:45 | 15' | | Martin Goldman | Umbrella model of electron "crescent" velocity distributions |
| 17.00 | | | | Poster session |
| 17:00 | 3h | | | Cocktail |

| POSTER SESSION (Tuesday 22 October 2019, 17-20h) | | | |
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| Marek Vandas | Models of magnetosheath magnetic field | | |
| Vincent Génot | The CDPP in the MMS era | | |
| Olga Tsareva | Relationship between wave-like auroral arcs and electromagnetic drift waves | | |
| Elena Grigorenko | The dynamics of electron anisotropy and its relation to whistler bursts observed at dipolarization fronts by MMS | | |
| Natalia Buzulukova | Global and Local Properties of the Reconnection Exhaust: Global Resistive MHD Simulations and MMS Observations | | |
| Konrad Steinvall | Observations of Electromagnetic Electron Holes and Evidence of Cherenkov Whistler Emission | | |
| Rungployphan Kieokaew | Multi-scale Structure Analyses of Magnetopause Kelvin-Helmholtz Waves: Applications of Four-spacecraft to MHD Simulations and Cluster and MMS Obse | | |
| Sid Fadanelli | On the latitude development of the Kelvin-Helmholtz instability and subsequent reconnection at the Earth's magnetospheric flanks | | |
| Gabriel Fruit | Destabilization of 2D magnetic current sheets by resonance with bouncing electrons - a new theory | | |
| Benoit Lavraud | Who knows what this is? | | |
| Yongcun Zhang | MMS observations of an anomalous out-of-plane magnetic field at X line | | |

| Wednesday 23 October 2019 (Room: Rhune 2) | | | | | |
|---|----------|-----------------|-----------------------|---|--|
| Time | Duration | Session | Speaker | Title | |
| 09:00 | 15' | | Jason Shuster | Kinetic Signatures of Force Balance at the Reconnecting Magnetopause: MMS Observations of Terms in the Ion and Electron Vlasov Equations | |
| 09:15 | 15' | EDR / | Daniel Graham | Non-Maxwellianity of electron distributions and their source regions | |
| 09:30 | 15' | Turbulence | Quentin Lenouvel | On the identification of Electron Diffusion Regions with neural networks at the magnetopause | |
| 09:45 | 15' | (J. Burch) | Jose López-Miralles | Measuring anomalous dissipation effects using a modification of the Wiener-Khinchin theorem. | |
| 10:00 | 15' | | Narges Ahmadi | Observations of Kinetic Turbulence associated with Magnetotail Reconnection | |
| 10:15 | 30' | | | Coffee Break | |
| 10:45 | 15' | | Yuri Khotyaintsev | Electron Heating by Debye-Scale Turbulence in Guide-Field Reconnection | |
| 11:00 | 15' | Turbulence / | Robert Ergun | Particle Acceleration by Strong Turbulence Associated with Magnetic Reconnection | |
| 11:15 | 15' | Flank | Julia E. Stawarz | Turbulence-Driven Magnetic Reconnection: A Survey of Magnetosheath Turbulence Observed by MMS | |
| 11:30 | 15' | (S. Fadanelli) | Hiroshi Hasegawa | Generation of turbulence in Kelvin-Helmholtz vortices at the Earth's magnetopause | |
| 11:45 | 15' | | Rungployphan Kieokaew | Observations of Magnetic Reconnection inside a Flux Transfer Event in Magnetopause Kelvin-Helmholtz Waves | |
| 12:00 | 2h | | | Lunch time | |
| 14:00 | 15' | | Takuma Nakamura | Effects of fluctuating magnetic field on the growth of the Kelvin-Helmholtz instability at the Earth's magnetopause | |
| 14:15 | 15' | Flank / | Katariina Nykyri | MMS Observations of Multi-Scale Wave Structures and Energized Electrons at the High-Latitude Dayside Boundary Layer | |
| 14:30 | 15' | magnetosheath | Sid Fadanelli | Energy densities and energy conversion rates at reconnection sites | |
| 14:45 | 15' | / Dayside | Daniel Gershman | Ion-Electron Decoupling in the Earth's Magnetosheath | |
| 15:00 | 15' | (J. Stawarz) | C. Philippe Escoubet | Magnetosheath high speed jets observed simultaneously at large distances by Cluster and MMS and future conjunctions | |
| 15:15 | 15' | | lan Cohen | Investigating the link between outer radiation belt losses and energetic electron escape at the magnetopause using MMS and Van Allen Probes | |
| 15:30 | 30' | | | Coffee Break | |
| 16:00 | 15' | | Stephen Fuselier | Imaging magnetosheath and magnetospheric ion populations at the Earth's subsolar magnetopause | |
| 16:15 | 15' | | Nicolas Aunai | Structure of the exhaust and orientation of the X line in th case of magnetopause reconnection | |
| 16:30 | 15' | Dayside | Stefan Eriksson | Reconnection Exhaust Structure at a Dayside Asymmetric Magnetopause | |
| 16:45 | 15' | (K. Genestreti) | Binbin Tang | Electron mixing and isotropization in the exhaust of asymmetric magnetic reconnection with a guide field | |
| 17:00 | 15' | | Naïs Fargette | On the ubiquity of magnetic reconnection inside flux transfer events at the Earth's magnetopause | |
| 17:15 | 15' | | Sadie Robertson | Topology of flux ropes on the magnetopause | |
| 17:30 | 15' | | M. Akhavan-Tafti | MMS Observations & Vlasiator Simulations of the FTE Coalescence Process | |
| 19:30 | | | | Social dinner: Evening of flavors at Les Halles de Biarritz | |

| | Thursday 24 October 2019 (Room: Rhune 2) | | | | | |
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| Time | Duration | Session | Speaker | Title | | |
| 09:00 | 15' | | Brandon Burkholder | Magnetospheric Multi-Scale Observation of Reconnection Near the Southern Geomagnetic Cusp | | |
| 09:15 | 15' | Dayside / | Sarah Vines | Outer magnetospheric EMIC wave properties: An MMS case study | | |
| 09:30 | 15' | Ionospheric ions | Gautier Nguyen | Automatic detection of magnetic reconnection jets using machine learning | | |
| 09:45 | 15' | (W. Li) | Rhyan P. Sawyer | Observations of Low Energy Ions by the TRICE 2 Sounding Rocket Campaign in conjunction with the MMS spacecraft | | |
| 10:00 | 15' | | Sergio Toledo-Redondo | Considerations on the MMS electrostatic potential structure when measuring cold ions in the Earth's magnetosphere | | |
| 10:15 | 30' | | | Coffee Break | | |
| 10:45 | 15' | | Justin Lee | Magnetospheric Multiscale observations of dense cold ions and electromagnetic ion cyclotron waves in a perturbed outer afternoon magnetosphere | | |
| 11:00 | 15' | Ionospheric ions | Paul Tenfjord | Streaming cold proton-reconnection interaction | | |
| 11:15 | 15' | / Methods | Jérémy Dargent | Simulation of the impact of a cold plasmaspheric plume on magnetic reconnection | | |
| 11:30 | 15' | (S. Vines) | V. Olshevsky (Y. Khotyaints | se Automated classification of plasma regions using 3D particle energy distribution | | |
| 11:45 | 15' | | Matthew Argall | Statistics of the magnetic field power spectrum observed by MMS | | |
| 12:00 | 2h | | | Lunch time | | |
| 14:00 | 15' | | Levon Avanov | Results of constant monitoring of the MMS/FPI MCP performance in flight | | |
| 14:15 | 15' | Methods / | Michael Gedaln | Collisionless relaxation in supecritical shocks | | |
| 14:30 | 15' | Bow shock | Mitsuo Oka | Electron Scattering by Low-Frequency Whistler Waves at Earth's Bow Shock | | |
| 14:45 | 15' | (T. Phan) | Michael Starkey | MMS Observations of accelerated He+ pick-up ions at a quasi-perpendicular interplanetary shock | | |
| 15:00 | 15' | (1.111011) | Steven Schwartz | Structure and evolution of a quasi-perpendicular shock: preliminary results from the MMS "Tilt Campaign" | | |
| 15:15 | 15' | | Hanying Wei | Shock associated whistler waves observed by MMS | | |
| 15:30 | 30' | | | Coffee Break | | |
| 16:15 | 15' | | | | | |
| 16:30 | 15' | | | | | |
| 16:45 | 15' | | | Spillover | | |
| 17:00 | 15' | | | | | |
| 17:15 | 15' | | | | | |