Turbulent Energy Transfer in Space Plasmas Workshop

Skylab seminar room (1st floor) Ecole Centrale de Lyon in Écully

Tuesday 29th August

09:30 – 10:00	Arrival and coffee
10:00 – 10:30	Words from the LMFA director (Christophe Bailly) and the ECL research director (Christophe Corre)
10:30 – 11:00	On the open questions involving multi-scale energy transport and dissipation in turbulent space plasmas *by Raffaele Marino*
11:00 – 11:30	Past, present, and future multi-spacecraft missions: existing tools and future development needs *by Rungployphan Kieokaew*
11:30 – 12:00	Plasma Observatory mission and its science *by Alessandro Retino*
12:00 – 13:30	Lunch break
13:30 – 14:00	Phase-mixing as an energy transfer driver toward kinetic scale and heating mechanism in space-plasmas *by Francesco Pucci*
14:00 – 14:30	Sub-ion-scale turbulence and ion heating: recent results from 3D hybrid-kinetic simulations *by Silvio Cerri*
14:30 – 15:00	Fast magneto-acoustic wave turbulence *by Sebastien Galtier*
15:00 – 15:30	Coffee break
15:30 – 16:00	Temporal Properties of Compressible MHD Turbulence and Implications for Particle Transport *by Hui Li*
16:00 – 16:30	Transport of Alfvénic turbulence in the corona and the solar wind *by Victor Réville*
16:30 – 17:00	Observation of kinetic scale magnetic turbulence with Solar Orbiter *by Matthieu Kretschmar*

Wednesday 30th August

09:30 – 10:00	Arrival and coffee
10:00 – 10:30	The HelioSwarm mission and the iESA ion instrument *by Benoit Lavraud*
10:30 – 11:00	The search-coil magnetometer (SCM) for the HelioSwarm mission *by Olivier Le Contel*
11:00 – 11:30	Signal to noise requirements for multiple spacecraft measurements *by Owen Roberts*
11:30 – 12:00	Energy transfer rate estimation by an HelioSwarm-like constellation in an Hall-MHD simulation *by Vincent Génot*
12:00 – 14:00	Lunch break
14:00 – 14:30	Waves and vortices in stratified MHD turbulence *by Claude Cambon*

14:30 – 15:00	Spectral properties and energy transfer at kinetic scales in collisionless plasma turbulence *by Giuseppe Arro*
15:00 – 15:30	Quadratic Magnetic Gradients from 7 SC and 9 SC Constellations *by Chao Shen*
15:30 – 16:00	Coffee break
16:00 – 16:30	Understanding Collisionless Turbulent Dissipation in Earth's Magnetosheath *by Alexandros Chasapis*
16:30 – 17:00	Probing Multiscale Turbulent Dynamics in the Era of Magnetospheric Multiscale and Beyond *by Julia Stawarz*
17:00 – 17:30	Multi-Spacecraft Magnetic Field Reconstructions: A Cross-Scale Comparison of Methods by *Theodore Broeren*

19:00 The social dinner at the "Brasserie Le Sud" (11 Pl. Antonin Poncet, 69002 Lyon), https://www.maisons-bocuse.com/nos-brasseries/brasserie-le-sud-lyon-2-bellecour/.

Thursday 31st August

09:30 – 10:00	Arrival and coffee
10:00 – 10:30	Interplay between Magnetic Reconnection and Current Sheet Instabilities in the Earth's Magnetotail *by Giulia Cozzani*
10:30 – 11:00	Multipoint Turbulence Analysis with HelioSwarm – application to MMS *by Francesco Pecora*
11:00 – 11:30	The role of the Kelvin-Helmholtz instability in driving magnetic reconnection and plasma transport: a 3D Hall-MHD study *by Silvia Ferro*
11:30 – 12:00	Energy transfer in dayside electron diffusion regions *by Naïs Fargette*
12:00 – 14:00	Lunch break
14:00 – 14:30	Magnetospheric MultiScale Measurements of Energy Balance in Collisionless Plasma *by Souhail Dahani*
14:30 – 15:00	Electric Field Turbulence in the Magnetosheath: Evaluating Generalized Ohm's Law using MMS *by Harry Lewis*
15:00 – 15:30	Two classes of magnetotail dipolarization fronts observed by Magnetospheric Multiscale Mission: A statistical overview *by Soboh Al-qeeq*
15:30 – 16:00	The Fast Lattice-Boltzmann Algorithm for MHD Experiments (FLAME) *by Emmanuel Lévêque*
16:00 – 16:30	Coffee break
16:30 – 17:30	**Splinters**