

Wednesday, June 21

09:00 – 12:30	Session 1	Instabilities and turbulence in partially magnetized plasmas : theory, diagnostics, and modeling
08:15 – 08:45	Welcome	
08:45 – 09:00	Introduction	Jean-Pierre BOEUF & Andrei SMOLYAKOV
09:00 – 09:30	Lecture 1	Benjamin JORNS (University of Michigan) An overview of instabilities capable of inducing cross-field transport in low -temperature, partially magnetized discharges
09:30 – 10:00	Lecture 2	Edgar CHOEIRI (Princeton University) Software and diagnostics for the study of instabilities in partially magnetized plasmas
10:00 – 10:30	Lecture 3	Igor KAGANOVICH (PPPL, Princeton Plasma Physics Laboratory) Electron-wall interactions and their consequences on transport
10:30 – 11 :00	Pause	
11:00 – 12:30	Discussion	Moderators :
12:30 – 14:00	Lunch	
14:00 – 17:30	Session 2	Magnetic Nozzles – Kinetic models
14:00 – 14:30	Lecture 4	Rod BOSWELL (Australian National University) Beam plasma discharges and the adiabatic expansion of an electron gas : the role of electric and magnetic fields
14:30 – 15:00	Lecture 5	Eduardo AHEDO (UC3M, Universidad Carlos III de Madrid) Physics and open issues on magnetized plasma plumes
15:00 – 15:30	Lecture 6	Ralf-Peter BRINKMAN (Ruhr-Universität Bochum) Kinetic description of magnetized technological plasmas
15:30 – 16 :00	Pause	
16:00 – 17:30	Discussion	Moderators :

Thursday, June 22

09:00 – 12:30	Session 3	The Electron Cyclotron Drift Instability
09:00 – 09:30	Lecture 7	Bertrand LEMBEGE (LATMOS, Univ. de Versailles-ST-Quentin-en-Yvelines) The electron cyclotron drift instability in space plasmas
09:30 – 10:00	Lecture 8	Sedina TSIKATA (ICARE, CNRS, Orléans) The electron cyclotron drift instability : thruster studies and physical interpretations
10:00 – 10:30	Lecture 9	Trevor LAFLEUR (LPP, Ecole Polytechnique) Electron drift instabilities in EXB plasmas : kinetic theory and PIC simulations
10:30 – 11 :00	Pause	
11:00 – 12:30	Discussion	Moderators :
12:30 – 14:00	Lunch	
14:00 – 17:30	Session 4	HiPIMS and other devices
14:00 – 14:30	Lecture 10	Fabrice DOVEIL (PIIM, Aix-Marseille University) Instabilities in the linear plasma MISTRAL
14:30 – 15:00	Lecture 11	Achim von KEUDELL (Ruhr-Universität Bochum) Instabilities and anomalous transport in HiPIMS
15:00 – 15:30	Lecture 12	Jón Tómas GUDMUNDSSON (University of Iceland, Reykjavik) Consequences of EXB transport on electron heating in HiPIMS
15:30 – 16 :00	Pause	Poster Session
16:00 – 17:30		Poster Session

19:30	Workshop Diner
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Friday, June 23

09:00 – 12:30	Session 5	Fluid modeling and theory of instabilities in partially magnetized plasmas
09:00 – 09:30	Lecture 13	Alejandro LOPEZ ORTEGA and Ioannis MIKELLIDES (NASA JPL) Electron transport by the EXB-driven ion acoustic instability in a Hall thruster based on r-z multi-fluid simulations
09:30 – 10:00	Lecture 14	Gerjan HAGELAAR (LAPLACE, CNRS & Univ of Toulouse) Fluid simulation of instabilities in partially magnetized plasmas
10:00 – 10:30	Lecture 15	Andrei SMOLYAKOV (Univ Staskatchewan) Instabilities in EXB plasmas – Theory, dispersion relations, fluid models
10:30 – 11 :00	Pause	
11:00 – 12:30	Discussion	Moderators :
12:30 – 14:00	Lunch	
14:00 – 17:30	Session 6	Spokes and their control
14:00 – 14:30	Lecture 16	Yevgeny RAITSES (PPPL, Princeton Plasma Physics Laboratory) Controlling of spokes and breathing oscillations in partially ionized EXB plasmas
14:30 – 15:00	Lecture 17	Francesco TACCOGNA (CNR NANOTEC, Bari) Examples of EXB instabilities predicted by PIC simulations
15:00 – 15:30	Lecture 18	Konstantin MATYASH (University of Greifswald) 3D PIC simulations of rotating spokes in wall-less thrusters
15:30 – 16 :00	Pause	
16:00 – 17:30		Discussion and conclusion