

Corrected Program– Friday

Friday, May 27, 2022

Theory and modeling of dusty plasmas

10:00-10:15 Ratchet driven transport – a novel paradigm of statistical thermodynamics in 2D Complex Plasmas (Anshika Chugh – contributed oral talk)

10:15-10:30 Molecular dynamics of active complex plasmas (Soumen De Karmakar – contributed oral talk)

10:30-10:45 From Rayleigh-Bénard convection cells to shear flows: a molecular dynamics study of 2D Yukawa liquids (Pawandeep Kaur – contributed oral talk)

10:45-11:00 Perturbed plane Couette flow in 3D Yukawa liquids: A molecular dynamics study (Suruj Kalita – contributed oral talk)

11:00-11:15 Strongly coupled rotating dust flow analysis within the Quasi-Localized Charge Approximation (QLCA) framework (Prince Kumar – contributed oral talk)

11:15-11:45 Coffee break

11:45-12:00 Lane formation dynamics in 3D strongly correlated pair-ion plasmas (Vishal Kumar – contributed oral talk)

12:00-12:15 Gyration ion beam driven dust acoustic wave instability in a complex plasma (Amit Kumar – contributed oral talk)

12:15-12:30 Spherical imploding shock waves in a weakly conducting dusty gas with the effect of solid body rotation (Pushpender Kumar Gangwar – contributed oral talk)

12:30-12:45 Nonlinear electrostatic streaming instabilities in viscoelastic quantum dusty plasmas (Smriti Roy – contributed oral talk)

12:45-13:00 Propagation of electromagnetic wave in quantum dusty magnetoplasma with two different electron spin states (Punit Kumar – contributed oral talk)

13:00-14:00 Lunch break

14:00-14:25 Wake formation in a polarized dusty plasma: solitary dust particle case (Gennadii Sukhinin – solicited talk)

14:25-14:50 Vibrational model of thermal conductivity in strongly coupled complex plasma fluids (Sergey Khrapak – solicited talk)

14:50-15:15 Thermodynamic stability of dusty plasmas (Anatolii Filippov – solicited talk)

15:15-15:40 Plasma Crystal as a Time Crystal (Alexander M. Ignatov – solicited talk)

15:40-16:10 Coffee break

16:10-17:00 Conference closing (Lev Zelenyi, Oleg Petrov, Sergey Popel)