



universität
wien



DK Seminar

April 20, 2016, 14:15 - 15:45

University of Vienna,

Oskar-Morgenstern-Platz 1, WPI seminar room, 8th floor

Ludovic Cesbron

University of Cambridge

Anomalous diffusion limit of kinetic equations in bounded domains

The subject of this talk is the anomalous diffusion limit of the fractional Vlasov-Fokker-Planck equation on spatially bounded domain. I will present this kinetic description of the movement of particles in a plasma and explained how we can derive from this model the macroscopic behaviour of that plasma. In particular, I will focus on bounded domains and investigate the interaction between the nonlocal diffusion phenomenon described in the fractional Vlasov-Fokker-Planck equation and reflective spatial boundaries.