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Kinetic Seminar

High-order Vlasov-Darwin system as non-relativistic approximation of the Vlasov-Maxwell system

by

Professor Ning JIANG
Wuhan University

Abstract :

We construct a nonlinear high-order Vlasov-Darwin system in the regime of non-relativistic limit of Vlasov-Maxwell system. We prove its local well-posedness of smooth solutions, and furthermore, we prove this system can approximate the relativistic Vlasov-Maxwell system to any power in term of the inverse of light velocity c when c goes to infinity. This is a joint work with N. Brigouleix, D. Han-Kwan and L.J. Xiong.

Date : November 10, 2022 (Thursday)
Time : 10:30am – 12:00noon (Hong Kong SAR)
ZOOM Meeting Link:
<https://cuhk.zoom.us/j/93858310982?pwd=NVBRTkhFYWVtVTZFZVlyQTJFamk0dz09>
ZOOM Meeting ID : 938 5831 0982
Passcode : 20221110

All are Welcome