



Analysis Seminar

Matched Hamiltonian Dynamics: Application to Vlasov Plasma

By

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Abstract: This talk will be about the problem of coupling two mutually interacting Hamiltonian systems in the Lie-Poisson form. To propose a solution to this problem, we shall present the theory of matched dynamics and introduce matched Lie-Poisson equations. It will be shown that the theory of matched dynamics is a generalization of the well-developed semi-direct product theory. The theory of matched dynamics will be discussed on several concrete physical models namely, magneto-electro hydrodynamics, Vlasov plasma, and its kinetic moments.

Date: Wednesday, October 13, 2021

Time: 18:00-19:00, GMT+3.

Place: ZOOM

To request the event link, please send a message to goncha@fen.bilkent.edu.tr