ID de Contribution: **17**   Type: **Non spécifié**

On the Stability of Traveling Waves in Plasma Physics and Fluid Mechanics

jeudi 20 février 2025 11:45 (45 minutes)

In this talk, we will discuss the stability of non-constant equilibrium solutions, such as periodic and solitary traveling waves, in certain conservative models arising from plasma physics and fluid mechanics, which often exhibit dispersive effects. Our primary focus will be on the long-term dynamics of periodic waves in one-dimensional equations (such as KdV and Whitham) and the transverse asymptotic stability of one-dimensional traveling waves in higher-dimensional systems (such as Euler-Poisson and water waves). If time permits, we will also mention other interesting related questions.

Orateur: M. SUN, Changzhen (CNRS & LMB, Besançon)