ID de Contribution: **5**   Type: **Exposé scientifique**

Invariant Gibbs measures for the 1D nonlinear Schrödinger equation with trapping potential

jeudi 9 novembre 2023 11:15 (45 minutes)

In this talk, we consider the one-dimensional nonlinear Schrödinger equation with a trapping potential that exhibits a growth of $|x|^s (s > 1)$ at infinity. Our main focus is on the construction and invariance of Gibbs measures associated with the equation. We determine conditions on the nonlinearity and the growth of potential that dictate whether Gibbs measures can be normalized, and we demonstrate their invariance under the flow of the equation. As a result, the equation is globally well-posed almost surely on the support of the Gibbs measures. This is joint work with Nicolas Rougerie (ENS de Lyon), Leonardo Tolomeo (University of Edinburg) and Yuzhao Wang (University of Birmingham).

Auteur principal: DINH, Van Duong (UMPA)

Orateur: DINH, Van Duong (UMPA)

Classification de thématique: Exposé