

OpenQMBP2023: New perspectives in the out-of-equilibrium dynamics of open many-body quantum systems



Contribution ID: 41

Type: **not specified**

Adiabatic atom losses in nearly integrable quantum gases

Tuesday, June 13, 2023 11:25 AM (20 minutes)

Cold atom gases are never perfectly isolated, and they typically suffer from atom losses. Different mechanisms for losses can be present, which are distinguished by the number of atoms K ($K = 1, 2, 3, \dots$) involved in each loss event. When the dynamics of the isolated gas is integrable, atom losses weakly break integrability, and the evolution of the gas can be captured by a slowly varying Generalized Gibbs Ensemble. I will briefly review this theory of 'adiabatic losses' and discuss some perspectives.

The talk will be based on joint work with Isabelle Bouchoule, Benjamin Doyon, Francois Riggio, Lorenzo Rosso, Dragi Karevski.

Presenter: DUBAIL, Jérôme (CNRS)

Session Classification: Conference: Dissipative Many-Body Quantum Systems