

From matrix resolvents to tau functions

Wednesday, June 7, 2017 11:30 AM (40 minutes)

We introduce a simple method of computing tau functions for a wide class of integrable systems, including the Drinfeld–Sokolov hierarchy and the Toda lattice hierarchy. This method expresses the generating series of logarithmic derivatives of a tau function in terms of matrix resolvents. We also discuss possible extension of this method to other integrable systems. The talk is based on a series of joint works with Marco Bertola and Boris Dubrovin.

Primary author: Dr YANG, Di (Max Planck Institute for Mathematics)

Presenter: Dr YANG, Di (Max Planck Institute for Mathematics)