Mathematical Physics Seminar

Fri, 10/28/2022, 1:00pm, REC 314 (unusual day and time)

Speaker:

Daniele Valeri, Sapienza University of Rome (Italy)

Title: Integrable triples in simple Lie algebras

Abstract: We define integrable triples in simple Lie algebras and classify them, up to equivalence. The classification is used to show that all (but few exceptions) classical affine W-algebras W(g,f), where g is a simple Lie algebra and f a nilpotent element, admit an integrable hierarchy of bi-Hamiltonian PDEs. This integrable hierarchy generalizes the Drinfeld-Sokolov hierarchy which is obtained when f is the sum of negative simple root vectors.

Zoom Link:available at https://www.math.purdue.edu/~ebkaufma/seminar.html