

Mathematics Department Colloquium

Organizer: Kenneth Ribet

Thursday, 4:10–5:00pm, MSRI, Simons Auditorium

Mar. 13 **Victor Kac**, M.I.T.

Poisson vertex algebras and integrable systems

In this talk I will explain the notion of a Poisson vertex algebra, which is related to infinite-dimensional integrable systems (like the KdV hierarchy) in the same way as Poisson algebras are related to Hamiltonian equations. Then I will discuss two conjectures on classification of infinite-dimensional integrable systems in the language of Poisson vertex algebras.