
Mon 17th Oct, 1h30pm

Michael Gekhtman

Title

LOG-CANONICAL COORDINATES ON POISSON-LIE GROUPS

Abstract.

Log-canonical coordinates provides the simplest from to which a quadratic Poisson bracket can be reduced via a rational transformation. Such coordinates play an important role in a construction of cluster structures on Poisson varieties. We present a construction of log-canonical charts on Poisson- Lie groups and Poisson homogeneous spaces associated with R-matrices arising in the Belavin-Drinfeld classification. The key ingredient is a Poisson map from a simple Lie group equipped with the standard Poisson-Lie group to the sam group equipped with a nontrivial Belavin-Drinfeld Poisson bracket. This is a joint project with M. Shapiro **and** A. Vainshtein.