1139-57-357   **Michael Gekhtman*** (`mgekhtma@nd.edu`). *Dilogarithm identities in cluster algebras from Hamiltonian/Lagrangian point of view.*

I will discuss a Hamiltonian formalism for cluster mutations using canonical (Darboux) coordinates and piecewise-Hamiltonian flows with Euler dilogarithm playing the role of the Hamiltonian. The Rogers dilogarithm then appears naturally in the dual Lagrangian picture. I will show how the dilogarithm identity associated with a period of mutations in a cluster algebra arises from Hamiltonian/Lagrangian point of view. (Based on the joint paper with T. Nakanishi and D. Rupel.) (Received February 16, 2018)