

1156-53-12

Christopher T Woodward* (woodwardc@gmail.com). *Lagrangian Floer theory in the tropics.*

I will first give an introduction to symplectic geometry, Hamiltonian flows, and Lagrangian Floer theory, starting with the example of rigid body motion and a formula of Archimedes. In the second half of the talk I will discuss whether Lagrangian Floer theory can be made combinatorial along the lines of work of Eleny Ionel and Brett Parker. Finally I will describe a recent joint result with Sushmita Venugopalan (IMSc Chennai) which generalizes work of Fulton and Sturmfels and gives an affirmative answer in good cases. Some applications will be described. (Received November 22, 2019)