

In this talk, we will explain how to construct closed Lagrangian submanifolds in mirror quintic threefolds using tropical curves and the toric degeneration technique. As an example, we will illustrate how the corresponding Lagrangians look like for tropical curves that contribute to the Gromov–Witten invariant of the line class of the quintic threefold. We will also show that multiplicity of a tropical curve, in this symplectic setting, will be realized as the order of the torsion the first homology group of the Lagrangian. This is a joint work with Helge Ruddat.