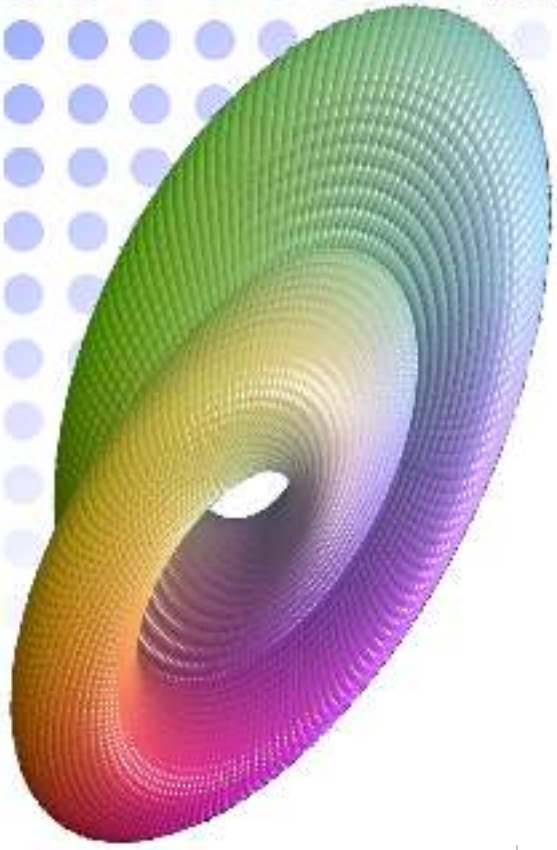
Michigan Math Club

Thursday at 4pm in the Nesbitt Room

Free Pizza and Pop



Do metric graphs dream of outer space? A friendly invitation to tropical moduli spaces

Martin Ulirsch

Abstract for 26 October

One of the central ideas of modern geometry is to not only study a geometric object by itself but also to understand it as naturally sitting in a moduli space parametrizing objects of the same type together with their degenerations. In fact, just like a prism disperses light into a spectrum of colors, in many cases moduli spaces allow us to access a priori hidden properties of the original object. In tropical geometry we may see this principle at work from a purely combinatorial perspective. The purpose of this talk is to give an elementary introduction to the geometry of tropical moduli spaces, assuming only minimal prerequisites. Our main focus will be on the moduli space of tropical curves, its cousin known as outer space, and the moduli space of tropical divisors (which connects this talk to Jonathan Gerhard's talk).