Connectivity and distributions of three dimensional tilings.

Caroline Klivans, Brown University

I will discuss domino tilings of three dimensional topological regions. First, we will characterize the connectivity of tilings under two local moves, the flip and trit, with respect to two algebraic invariants, the twist and flux. Second, we will consider the distribution of tilings with respect to these invariants offering more conjectures than answers. Joint work with Juliana Freire, Pedro Milet, and Nicolau Saldanha.