

Topology and Neural Networks

J. Elisenda Grigsby, Boston College

I am a geometric topologist by training, with a recently-developed interest in the mathematics underlying neural networks. I'll talk about a few of the explicit topological and dynamical questions that have guided my exploration of the subject, some of which arose during on-going discussions with Jesse Johnson and Kathryn Lindsey. I'll also say a few words about efforts to tie this exploration to undergraduate research projects focused on experimentation and visualization.