UNIVERSITY AT ALBANY
State University of New York

College of Arts and Sciences
Department of Mathematics and Statistics

Algebra/Topology Seminar

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Decomposition Posets for Complex Vector Spaces

Thursday, September 7, 2017
1:15 p.m. in ES-143

Abstract. I will discuss the space $\mathcal{L}_n$, the nerve of the poset of proper orthogonal decompositions of complex n-space. The space $\mathcal{L}_n$ makes an appearance in the orthogonal calculus of M. Weiss. It has many parallels to the space $\mathcal{P}_n$, the nerve of the poset of nontrivial, proper partitions of an n-element set, which makes an important appearance in the Goodwillie calculus of functors. I will explain recent advances in understanding the $U(n)$-equivariant homotopy type of $\mathcal{L}_n$.