Algebra/Topology Seminar

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$C_{p^r q^s}$ Compatible Transfer Systems

Thursday, November 7, 2024
3:00 p.m. in BB-B012

Abstract. Transfer systems are combinatorial objects that encode information about equivariant operations. More precisely, a transfer system encodes the transfers (or wrong-way maps) carried by algebras over certain equivariant operads. Thus, transfer systems allow us to use combinatorial tools to study equivariant homotopy theory. Compatible pairs of transfer systems, which are a pair of transfer systems satisfying certain conditions, correspond to multiplicative structures compatible with an underlying additive structure. In particular, compatible pairs are closely related to bi-incomplete Tambara functors. In this talk we introduce transfer systems, compatible pairs, and discuss when a transfer system is only compatible with at most two other transfer systems. The work discussed in this talk began as a collaboration through the Women in Topology workshop and is joint with Kristen Mazur, Angélica M. Osorno, Constanze Roitzheim, Rekha Santhanam, and Valentina Zapata Castro.