

A New Way of Looking at the Traditional Theorems of Algebraic Topology

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October 22, 1998

102 Bradley Hall, 4:00 pm
(Tea 3:30 pm Math Lounge)

Abstract

We present a certain global approach towards algebraic topology. It has grown out of work of A.K. Bousfield and E.Dror Farjoun. The key theme is to understand the way spaces are built from other presumably better understood pieces (by analogy to simplicial complexes being glued from simplices). We present a new way of looking at traditional theorems in Algebraic Topology, generalizing them, and giving more transparent proofs. In this way we could also show that certain statements that seem to be not connected, are in fact reflections of the same phenomena. The talk is for a general audience, and no working knowledge of Algebraic Topology is assumed. I will try to explain ideas and give examples.