

CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Thursday, April 25

2:00 – 2:50 PM

Room EDB 126

COMPACTIFICATIONS OF MANIFOLDS WITH BOUNDARY

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Abstract: In 1966, Larry Siebenmann once mused that his work was initiated at a time "when 'respectable' geometric topology was necessarily compact". That attitude has long since faded; today's topological landscape is filled with research in which noncompact spaces are primary objects. Major successes in understanding certain noncompact spaces included here are fundamental to manifold topology and geometric group theory: Whitehead and Davis manifolds, Stallings's characterization of Euclidean spaces, Siebenmann's thesis and Gu-Guilbault's manifold completion theorem --- to name just a few. My goal is to provide a quick access to some of those results by weaving them together with common interpretations, motivating examples and current research. I hope this talk will give the audience with various interests a brief appreciation of some of that work.

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