

# Colloquium

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## ON HOLES IN BROWNIAN BUBBLES

Friday, April 25, 2025

3:00 p.m. in Social Sciences 256

(tea & coffee at 2:40 p.m.)

**ABSTRACT.** The topology of the Brownian Bubbles, the supersets of the Brownian sheets, is notoriously hard to study: these supersets have fractal boundaries, and they typically form an archipelago, a countable family of ever smaller islands. Yet a natural denoising tool, persistent homology, allows one to extract information about the largest topological patterns of Brownian Bubbles using some results about trees of Brownian walks, and an additive structure on them.