Department of MathematicsUniversity of Notre Dame

TOPOLOGY SEMINAR

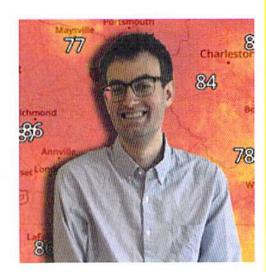
Guest Speaker: Jeremy Hahn

MIT

Date: Tuesday, April 16, 2019

Time: 2:30 PM

Location: 258 Hurley Hall



Lecture Title:

Even Spaces and Snaith Constructions

Abstract

Talk I: 2:30-3:30

Talk II: 4:00-5:00

Call a CW-complex even if it has only even-dimensional cells and even-dimensional homotopy groups. An example is the infinite complex projective space CP^{∞} , which has only a single non-zero homotopy group in dimension 2. I will survey work of Wilson that classifies all even spaces, as well as work of Hill and Hopkins that classifies certain group actions on even spaces. I will then explain work of myself and Allen Yuan that extracts cohomology theories out of even spaces, the prototype of which is Snaith's construction of complex K-theory from CP^{∞} .