Topology Seminar

Jeremy Hahn

of MIT will be speaking on

The spectrum of units of a height 2 theory

on September 17 at 4:30 in MIT Room 2-131

The space BSU admits two infinite loop space structures, one arising from addition of vector bundles and the other from tensor product. A surprising fact, due to Adams and Priddy, is that these two infinite loop spaces become equivalent after *p*-completion. I will explain how the Adams-Priddy theorem allows for an identification of $sl_1(ku_p)$, the spectrum of units of *p*-complete complex *K*-theory. I will then describe work, joint with Andrew Senger, that attempts to similarly understand the spectrum of units of the 2-completion of $tmf_1(3)$. Our computations seem suggestive of broader phenomena, and I hope to end with several open questions.