Kempner Colloquium

Some applications of Morse theory

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Morse theory was developed in the 1920s as an analytic tool for studying problems in geometry and topology. I will describe the basic constructions of Morse theory and sketch the ideas behind some of the major results of Morse, Milnor, Smale and Kirwan. If time permits, then at the end of the talk I will describe the motivation behind developing a Morse-Kirwan theory on singular spaces (this last part will be an advertisement for my seminar talk on Tuesday).

The talk will emphasize ideas, pictures and examples rather than technical details. The first 30-40 minutes is intended to be accessible to a general audience.

February 20, 2012
4:00 p.m.
MATH 350