Kempner Colloquium

POSITIVE MASS THEOREMS AND SCALAR CURVATURE PROBLEMS

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More than 30 years ago, Schoen-Yau and later Witten made major breakthroughs in proving the positive mass theorem. It has become one of the most important theorems in general relativity and differential geometry. In the first part of the talk, I will introduce and discuss the positive mass theorem and present our recent work that extends the classical three-dimensional results to higher dimensions. In the second part, I will discuss how the observation from general relativity enables us to solve classical geometric problems related to the scalar curvature.

January 17, 2011
3:00 p.m.
MATH 350

1