

COLLOQUIUM

University of Notre Dame
Department of Mathematics

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Will give a lecture entitled

Extremal Kahler metrics

On

Thursday, February 17, 2011

at 4:00 PM in Room 129 Hayes-Healy Hall

Abstract:

Extremal Kahler metrics were introduced by Calabi as candidates for canonical metrics in a fixed Kahler class. The existence of extremal metrics is intimately related to algebro-geometric properties of the underlying complex manifold. I will explain the Yau-Tian-Donaldson conjecture, which makes this relationship precise and I will then provide some examples of existence and non-existence results, to illustrate the types of phenomena that can occur.