Geometry, Groups and Dynamics/GEAR Seminar
(held at the Illinois hub of GEAR)

Thursday, February 12, 2015, 1:00 pm in 243 Altgeld Hall

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A Liouville theorem on Kaehler Ricci flat metric in C^n with conical singularities along $\{0\}$ x C^{n-1}

Abstract: We prove a new Liouville type theorem which goes back to E. Calabi and Pogorelov. The theorem of Calabi and Pogrelov can be formulated as follows: In C^n, any Kaehler Ricci flat metric which depends on R^n (i.e., admitting standard toric symmetry) must be trivial. We prove that, in C^n, any Kaehler Ricci flat metric which has conical singularity along $\{0\}$ x C^{n-1} and is quasi conformal to a standard flat conical metric must be trivial. This has important application in conical Kaehler geometry (such as regularity for conical Kaehler Einstein metrics). Joint with Yuanqi Wang.

Video