

Kempner Colloquium

FORM-TYPE COMPLEX MONGE-AMPERE EQUATIONS

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The complex Monge-Ampere equation has been intensively studied since Yau's resolution of the Calabi conjecture. Its solution provides a canonical Kahler metric on a compact Kahler manifold. As a natural generalization of Kahler metrics, the balanced metrics play an important role in the mathematical aspects of the superstring theory. To construct a canonical balanced metric, with Jixiang Fu and Zhizhang Wang, we introduce the form-type Monge-Ampere equation. In this talk I will compare the form-type equation with the classical complex Monge-Ampere equation, and discuss our recent results in this new direction.

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4:00 PM

MATH 350