Analisys, Algebra & Geometry Meetings

Dipartimento SMFI - Università di Parma

19.10.2023
17:00

Sala Riunioni - Plesso di Matematica

Annamaria Ortu (Ph.D. SISSA)

Kähler geometry of holomorphic submersions

Proper holomorphic submersions of Kähler manifolds can be thought of as both a generalisation of holomorphic vector bundles and as a way of studying the behaviour of Kähler manifolds in families. On holomorphic vector bundles, the Hitchin Kobayashi correspondence establishes an equivalence between the existence of special connections, called Hermite-Einstein connection, and an algebro-geometric notion of stability. We will describe a generalisation of the Hermite-Einstein connection on more general fibrations, called *optimal symplectic connections*, which allow to construct a Kähler metric with constant scalar curvature on the total space. We will then describe a moduli space of fibrations admitting an optimal symplectic connection.

FONDAZIONE CARIPARMA

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