Null-Kahler Geometry

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"I shall explain a construction of the normal forms of null-Kahler metrics: pseudo-Riemannian metrics admitting a compatible parallel nilpotent endomorphism of the tangent bundle. Such metrics are examples of non-Riemannian holonomy reduction, and (in the complexified setting) appear in the Bridgeland stability conditions of the moduli spaces of Calabi-Yau three-folds. Using twistor methods I show that, in dimension four the cohomogeneity-one anti-self-dual null-Kahler metrics are generically characterised by solutions to Painleve I or Painleve II ODEs."

Data:	Martes 7 de Setembro de 2021.
Lugar:	Aula 10, Facultade de Matemáticas.
Duración:	1 hora.
Hora:	17:00.