CENTRO DE MATEMÁTICA

UNIVERSIDADE DO PORTO

GEOMETRY AND TOPOLOGY SEMINAR

The deformed Hermitian-Yang-Mills equation .

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Abstract. Mirror symmetry is a somewhat mysterious phenomenon that relates the geometry of two distinct Calabi-Yau manifolds. In the realm of trying to understand this relationship an equation for a connection on a line bundle in a Kahler manifold appeared. This is commonly called the deformed Hermitian-Yang-Mills equation and I will explain what it is and the current joint work with Benoit Charbonneau and Rosa Sena-Dias which explicitly solves this equation on a specific setting. This helps in understanding the problem of the existence of solutions and ruling out possible stability conditions.

FRIDAY, MARCH 1ST   **15H30**   **ROOM: FC1 029**