# ICMAT

INSTITUTO DE CIENCIAS MATEMÁTICAS

# GEOMETRY

## seminar

# HARMONIC SURFACES

**SPEAKER:** Nigel Hitchin (Universidad de Oxford)

**DATE:** Wednesday, 13th June 2018 - 11:30

**PLACE:** Aula Naranja, ICMAT, Campus de Cantoblanco

**ABSTRACT:** The Higgs bundle approach to flat connections involves an equivariant harmonic map from the universal cover of a Riemann surface to a symmetric space G/K. The talk will discuss the situation where G is the group of Hamiltonian diffeomorphisms of the cotangent bundle of the circle and K is the subgroup preserving the antisymplectic reflection in the zero section. It leads to the study of a particular class of Finsler surfaces. The main goal is to produce an infinite-dimensional analogue of Teichmueller space as a moduli space of geometric structures on the surface.