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## **SEMINARIO**

# **OPTIMIZACION Y EQUILIBRIO**

Expositor David Salas Universite de Montpellier

# Title "Smoothness of the Metric Projection onto Nonconvex Bodies in Hilbert Spaces"

## Abstract:

"Based on a fundamental work of R. B. Holmes from 1973, we study differentiability properties of the metric projection onto prox-regular sets. We show that if the set is a nonconvex body with a Cp+1-smooth boundary, then the projection is Cp-smooth near suitable open truncated normal rays, which are determined only by the function of prox-regularity. A local version of the same result is established as well, namely, when the smoothness of the boundary and the prox-regularity of the set are assumed only near a fixed point."

Miércoles 23 de Diciembre del 2015 a las 16:30 hrs. En la Sala de Seminarios John Von Neumann CMM., Séptimo Piso, Torre Norte, Beuchef 851.

