



DEPARTAMENTO
DE ANÁLISIS
MATEMÁTICO Y
MATEMÁTICA
APLICADA



Facultad de Ciencias
MATEMÁTICAS



Instituto de
Matemática
Interdisciplinar

SEMINARIO DE ANÁLISIS MATEMÁTICO Y MATEMÁTICA APLICADA

Timur Oikhberg
**University of Illinois at Urbana -
Champaign**

The geometry of unit ball of a Banach lattice, with applications to free lattices

This talk consists of two parts. First, we investigate an “order” version of convexity in Banach lattices. In particular, we define the notion of an “order extreme point,” and obtain “positive” analogues of Hahn-Banach separation, and of Krein-Milman theory.

In the second part, we represent the unit balls of free Banach lattices as order convex hulls of “manageable” sets. From this, we extract information on approximation properties of free Banach lattices, as well as on the norms of lattice homomorphisms between them.

(Joint work with M.A.Tursi)

**Organizado por el Departamento de Análisis Matemático y Matemática Aplicada y el
Instituto de Matemática Interdisciplinar (IMI)**

**Fecha: Jueves 23 de marzo de 2023
a las 13:00 horas
Lugar: Aula Alberto Dou (209)
Facultad de CC Matemáticas, UCM**