



UNIVERSIDAD DE GRANADA

Máster Universitario en
Matemáticas

Seminarios de Investigación

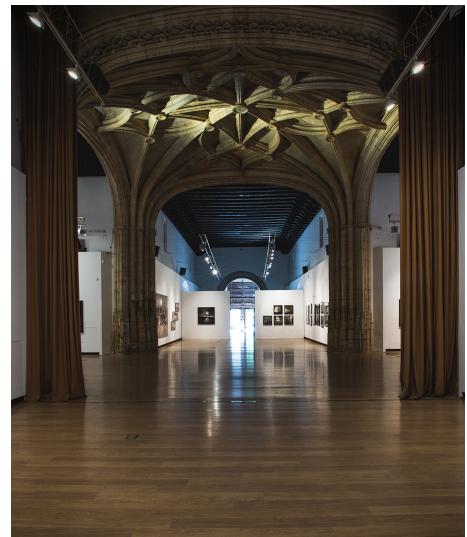
22/03/2015

A cargo del Profesor Martin Buhmann de Justus-Liebig-Universität Giessen, Alemania,

El **Prof. Martin Buhmann** (Justus-Liebig-Universität Giessen, Alemania), va a impartir dos conferencias sobre Teorías de Interpolación en la Universidad Granada. La información detallada es la siguiente:

Conferencia 1

- **Día:** Miércoles, 25 de marzo de 2015
- **Hora:** 18:00
- **Lugar:** Seminario 1 de la ETSI Caminos, Canales y Puertos (cuarta planta).
- **Título:** **Interpolation with radial basis functions and parameters.**



Abstract: Among the many approaches to approximation and interpolation, the ansatz using the so-called radial basis functions is a most successful one. This is because it works in all dimensions and practically for all types of distributions of the data points of which we are allowed to have arbitrarily many in arbitrary dimensions. In this talk we review the radial basis function method and explain why and how it works well. Both interpolation and other means of approximation will be addressed as well as several different choices of radial basis functions.

Conferencia 2

- **Día:** Jueves, 26 de marzo de 2015
- **Hora:** 18:00
- **Lugar:** Seminario 1 de la ETSI Caminos, Canales y Puertos (cuarta planta).
- **Título:** **Quasi-interpolation with radial basis functions**

Abstract: As an alternative to interpolation in high dimensions using the universal and successful method of radial basis functions, there is the method of quasi-

interpolation that also works in many dimensions and with all known classes of radial basis functions such as Gauss kernels and multiquadratics. In this talk we describe the approach of quasi-interpolation, show the existence of quasi-Lagrange functions and study in detail their convergence behaviour to approximands that are in suitable function spaces.