



DEPARTAMENTO DE  
MATEMÁTICA APLICADA



# Seminario de Matemática Aplicada

**Dimitru Baleanu**

**Universidad de Çankaya, Turkey**  
**Institute of Space Sciences, Romania**

## **“Fractional calculus and its applications”**

Fractional calculus deals with the study of so-called fractional order integral and derivative operators over real or complex domains as well as their applications. Fractional calculus has its root in the question of the extension of meaning. In recent decades the fractional calculus has won more and more interest in mathematics and in various fields of applied sciences.

In my lecture I will present the new trends in the area of fractional dynamics. Namely, several recent applications of this type of dynamics in physics, mathematics, economics, bioengineering and engineering will be illustrated.

**Organizado por el Departamento de Matemática Aplicada de la UCM, el Grupo Modelización y Simulación en el Cálculo Fraccionario y de la Atmósfera de Marte y el IMI**

**Fecha: 23 de noviembre de 2010, a las 11.00 horas**  
**Seminario Alberto Dou (aula 209)**  
**Facultad de CC. Matemáticas, UCM**