

March 11, 2008  
UCM  
Facultad de Matemáticas  
Seminario 222  
Avda. Complutense s/n,  
Madrid



**SIMUMAT** A remarkable attempt to foster synergies within the mathematical community and affine areas. Project financed by the Community of Madrid [www.simumat.es](http://www.simumat.es)

**John von Neumann** (1887-1956) Provided a rigorous framework for quantum mechanics. He also worked in game theory, studied what are now called von Neumann Algebras, and was one of the pioneers of computer science.

2008 i-Math Semester on "The Mathematical Foundations of Quantum Control and Quantum Information Theory"  
[www.ucm.es/inforsef/qci/](http://www.ucm.es/inforsef/qci/)

## XII Jornada SIMUMAT / XII SIMUMAT day Mathematical Structures on Quantum Mechanics II

### Programme:

10:00 A.P. Balachandran (Syracuse Univ.)

*Quantum physics on fuzzy spaces*

11:00 Coffee

11:30 G. Marmo (Univ. Naples)

*GNS construction on geometric quantum mechanics*

14:00 Lunch

15:30 A. Ibort (Univ. Carlos III de Madrid)

*Optimal control of classical spin systems*

16:15 R. Salmoni (Univ. Naples)

*A time optimal synthesis for a two-level quantum system*

17:00 J. Clemente-Gallardo (Univ. Zaragoza)

*Towards quantum integrability*



Contacto: Alberto Ibort  
[albertoi@math.uc3m.es](mailto:albertoi@math.uc3m.es)