## UNICAMP – IMECC Departamento de Matemática

## Seminário de Sistemas Dinâmicos e Estocásticos

**Expositor:** S. M. Molina (Universidad de Mar del Plata)

**Título:** Complex powers of differential operators:

Applications to Bessel operator

Data: Sexta-feira, 28 de junho de 2013, 13h30min

Local: Sala 321 do IMECC

**Resumo.** In this talk we shall describe a method to study nonnegativity of linear differential operators with coefficients of class  $C^{\infty}$  on a weight Lebesgue space. This approach is based on the nonnegativity of similar differential operators (which have the same spectral properties) on weight Lebesgue spaces. If these new operators are formally self-adjoint and are not negative, we can study their powers through a appropriate spaces of distributions. In particular we apply this method to Bessel-type operators.