WORKSHOP ON FRACTIONAL CALCULUS  
AND ITS APPLICATIONS  
Roma Tre, March 11, 2015

PROGRAM

h. 9:00-11:00 am, **Numerical methods:**
- Diethelm, “Numerical methods for terminal value problems of fractional order”
- Yuste: “High order adaptive methods for fractional PDEs”
- Garrappa: “Numerical methods for fractional operators involved in anomalous polarization processes”

h. 11:30-13:00, **Models with memory:**
- Caputo: “Why new fractional derivatives?”
- Fabrizio: “Damage and fatigue by a fractional model”
- Cavallaro: “Approach to equilibrium of a sphere in a Stokes fluid”

14:00-16:00, **Anomalous diffusion and probabilistic applications:**
- Beghin: “From fractional diffusion equations to fractional shift operators”
- Pagnini: “Generalized grey Brownian motion: from classical diffusion to Erdelyi-Kober fractional diffusion”
- Agliari: “Levy flights with power-law absorption”
- Concezzi: “Numerical solution of two-dimensional fractional diffusion equations by a high-order ADI method”

16:30-17:30, **Special Functions and analytical methods:**
- Cesarano: “Special polynomials in the description of fractional calculus”
- Garra: “Fractional Klein-Gordon equation: analytical methods and applications”