9th Δiffiety ∫chool

School in Geometry of Partial Differential Equations
Santo Stefano del Sole (AV), Italy
July 14 - 31, 2006

The aim of the School is to introduce undergraduate and Ph. D. students in Mathematics and Physics as well as post-doctoral researchers in a recently emerged area of Mathematics and Theoretical Physics:

Secondary Calculus.

A **diffiety** is a new geometrical object that properly formalizes the concept of the solution space of a given system of (nonlinear) PDEs, much as an algebraic variety does with respect to solutions of a given system of algebraic equations. **Secondary Calculus** is a natural diffiety analogue of the standard Calculus on smooth manifolds, and as such leads to a very rich general theory of nonlinear PDEs. There are strong indications that Secondary Calculus may become a natural language for quantum field theory, just as the standard Calculus is the natural language for classical physics.

Scientific director: **A. M. Vinogradov.**