

# 9<sup>th</sup> Diffiety School

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.**

In Cooperation with: Diffiety Institute (Russia), Istituto Italiano per gli Studi Filosofici (Italy), Municipality of Santo Stefano del Sole (Italy), Comunità Montana Serinese-Solofrana (Italy), Ente Morale S. Vito Martire (Italy).

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Further information and how to apply can be found on the Diffiety Institute sites: <http://diffiety.ac.ru>, <http://diffiety.org>.

