



# XI $\Delta$ iffiety School

The aim of this permanent 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.

*Directed by A. M. Vinogradov*

**Santo Stefano del Sole (AV), Italy**  
**July 17 - August 1, 2008**

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. Moreover, it appears to be the unique natural language for quantum physics, just as the standard Calculus is the natural language for classical physics.

*In Cooperation with:* Diffiety Institute (Russia)

Istituto Italiano per gli Studi Filosofici (Italy)

Dipartimento di Matematica e Informatica, Università degli Studi di Salerno (Italy)

Municipality of Santo Stefano del Sole (Italy)

Comunità Montana Serinese-Solofrana (Italy)

Ente Morale S. Vito Martire (Italy)

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for further information and how to apply.