



# Diffiety School

School in Geometry of Partial Differential Equations

*Santo Stefano del Sole*

*Avellino (Italy), July 16 - August 1, 2005*



Sunset viewed from the hills around Santo Stefano del Sole.



Participants and teachers of the 7th Diffiety School.



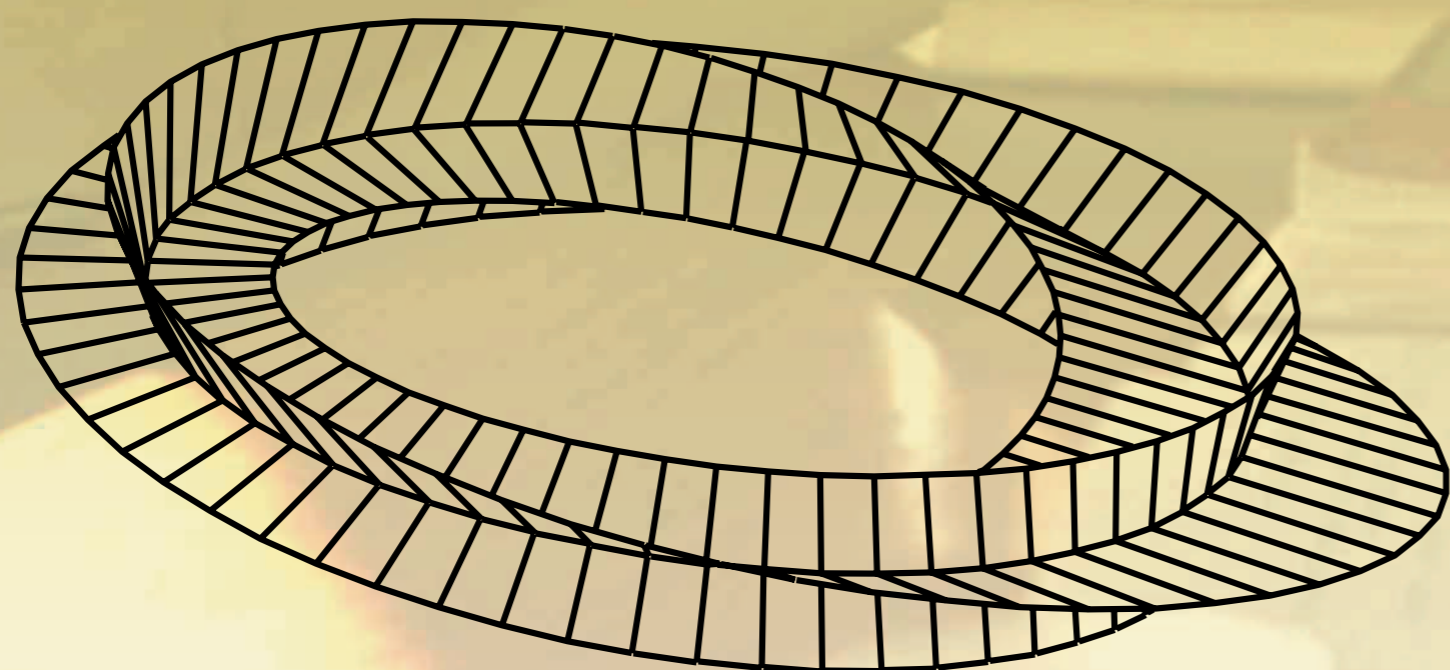
The small village of Santo Stefano del Sole.

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. Moreover, it appears to be the unique natural language for quantum physics, 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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Institute sites: <http://diffiety.ac.ru>, <http://diffiety.org>.

This year the Diffiety School is dedicated to the memory of our friend and colleague prof. G. Rotondaro, recently disappeared.