

# SECOND ANNOUNCEMENT

## Summer School on the Geometry of differential equations

DAVIDŮV MLÝN

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The Mathematical Institute of Silesian University invites you to take part in the first of the three summer schools on the geometry of differential equations supported by the European Social Fund under the project CZ.1.07/2.3.00/20.0002 (see <http://projects.math.slu.cz/RVKMU/>). Two further summer schools on similar subjects will take place in 2013 and 2014.

### Scientific Programme

The following two parallel courses will take place during the summer school.

**Basic Course.** R. Vitolo (Univ. of Salento) and G. Moreno (Silesian University in Opava)

*Symmetries and conservation laws.* Jet spaces, differential equations; symmetries, conservation laws, and their computation; applications of symmetries and conservation laws.

**Advanced course** I.S. Krasil'shchik (Silesian University in Opava and the Independent University of Moscow) and A.M. Verbovetsky (the Independent University of Moscow)

*Recursion operators.* Coverings, nonlocal symmetries, recursion operators and their computation, examples, the hereditary property of recursion operators and related concepts.

The basic course is aimed at the beginners, with the pace and style of presentation to match. The advanced course is aimed at the students who are already familiar with the contents of the basic course.

The courses will provide students with a comprehensive presentation of the respective subjects, and introduce them to the basic motivations, methods and results of the relevant field of study. Participants will also be informed about the open problems in the field.

The courses will include training sessions, in the course of which which the participants will learn to use the software for the computer-aided calculation of symmetries and conservation laws, resp. of coverings and recursion operators.

A detailed description of the courses can be found on [http://gdeq.org/Summer\\_school\\_on\\_geometry\\_of\\_differential\\_equations](http://gdeq.org/Summer_school_on_geometry_of_differential_equations)

The teaching will be in English with a total of 40 academic hours of morning lectures and afternoon training sessions.

In the course of the training sessions, the participants are expected to solve sets of problems and submit their solutions to the instructor who will provide advice and feedback on these if need be. A certificate will be awarded to successful participants on the basis of performance at the training sessions.

### Venue

The Summer School will take place in the North-Eastern part of the Czech Republic in hotel Davidův mlýn (see [www.daviduvmlyn.cz](http://www.daviduvmlyn.cz)) located in the valley of the Moravice river. The place invites to enjoy romantic walks along the river or relax in the nearby aerial adventure park (forest ropes course).

### Accommodation and traveling

Rooms in the hotel have already been reserved for registered participants. Reservations were made from Sunday evening to Saturday morning. International participants will pay subsistence costs on their own; hotel prices (lodging + food) are about 40 EUR per person and day.

Participants will have enough opportunities to travel from Opava to the hotel Davidův mlýn by university car. The meeting point will be the building of Mathematical Institute ([Na Rybníčku 1, Opava](#)). Air travellers should use either Prague or Vienna or Katowice airport and then continue by train to the station [Opava-východ](#) through Ostrava-Svinov.

## Registration

Please contact the organizers at [school-gde@math.slu.cz](mailto:school-gde@math.slu.cz) as soon as possible, because of limited capacity of the school. No registration fee is charged.