





Utrecht, The Netherlands

Term rewriting is a powerful model of computation underlying much of declarative programming and which is heavily used in symbolic computation in logic and computer science. Applications can be found in theorem proving and protocol verification, but also in fields as diverse as mathematics, philosophy and biology.

Following the editions in Nancy (twice, France), Obergurgl (Austria), and Brasília (Brazil), the 5th International School on Rewriting takes place in Utrecht, The Netherlands. The school is aimed at master and PhD students, researchers and practitioners interested in the study of rewriting concepts and their applications. To accommodate the different backgrounds, we offer two tracks:

- Basic. A full-fledged introductory course at master/PhD level accompanied with exercise sessions for students without previous exposure to term rewriting;
- Advanced. A series of more advanced lectures at PhD/researcher level on recent developments and applications.

Location

The school takes place in the historical city centre of Utrecht. Utrecht is located in the centre of the Netherlands, and is known for its university, its treaty, the 112m high Dom tower dating back to 1321, its wharves, and canal side terraces.



The Netherlands has a sea climate and the average temperature in July is between 20 and 25 degrees Celsius. Utrecht has excellent public transport connections to the rest of the country and to the major international airports of Amsterdam (Schiphol, 30 minutes by train, every 15 minutes) and Frankfurt (3.5 hours by train, 8 times per day).

Organisation

ISR 2010 is organised under the auspices of IFIP WG 1.6, and takes place as part (course H16) of Utrecht Summer School 2010. The school is planned such that participants can subsequently attend the major yearly conference on rewriting. RTA 2010, or other conferences that are part of the federated logic conference FLoC 2010 in Edinburgh.

Registration



```
http://www.utrechtsummerschool.nl/
```

The fees in euros (\in) below include participation, course material for both tracks, the ISR dinner event, and the Social Programme as offered by the Utrecht Summer School, e.g. world cup semi-finals, but do not include meals. Housing includes both saturday and thursday night.

	track	housing
basic	200	175
advanced	250	175

A limited number of grants is available to cover the basic registration fees for a number of exceptional students.

Lecturers

Aart Middeldorp	Univ. of Innsbruck, Austria
Femke van Raamsdonk	VU Amsterdam, The Netherlands
Ashish Tiwari	SRI International, Menlo Park, CA, USA
Ralf Treinen	PPS, Univ. Paris-Diderot, France
Peter Schneider-Kamp	Univ. of Southern Denmark, Odense, Denmark
Hans Zantema	Eindhoven Univ. of Tech., Radboud Univ. Nijmegen
Adam Koprowski	R&D MLstate, Paris, France
Georg Moser	Univ. of Innsbruck, Austria
Dimitri Hendriks	VU Amsterdam, The Netherlands
Jörg Endrullis	VU Amsterdam, The Netherlands
Clemens Grabmayer	Utrecht Univ., The Netherlands







Netherlands Organisation for Scientific Research

ISR 2010 website

http://www.phil.uu.nl/isr2010/

Program



Two Tracks

Basic.lectures 1, 2: no prior exposure to term rewritingAdvanced.lectures 4, 5, 6, 7, 8, 9: knowledge of term rewriting

lecture 3: common lecture for Basic and Advanced tracks

Lectures

- 1. Introduction to Term Rewriting Aart Middeldorp and Femke van Raamsdonk
- 2. Exercises accompanying 1.
- 3. Applications of Rewriting in Design and Analysis of Algorithms Ashish Tiwari
- 4. Tree Automata and Rewriting Ralf Treinen
- 5. Complexity Analysis of Term Rewrite Systems Georg Moser
- 6. Termination of Programs Peter Schneider-Kamp
- 7. Productivity Jörg Endrullis, Dimitri Hendriks, Clemens Grabmayer
- 8. SAT solving for term rewriting Hans Zantema
- 9. Coq and rewriting Adam Koprowski