

# Soria Summer School on Computational Mathematics

Hosted by SINGACOM, Universidad de Valladolid  
July 13-24 Soria, Spain

## Erasmus Intensive Program: Applied Computational Algebraic Geometric Modelling

The research group **SINGACOM** of Valladolid University (Spain) is organizing an INTERNATIONAL SCHOOL ON APPLIED COMPUTATIONAL ALGEBRAIC GEOMETRIC MODELLING from 13 to 24 July 2009 in Soria, Spain.

The main aim of this school is to bring together specialists, researchers and students working on various aspects of Computer Algebra and Geometry and their applications.

The academic program consists of a school on topics of current interest taught by leading experts. Also, there will be afternoon working sessions where interested postgraduate students can show their work in progress.

### Advance of the program

#### First week (13-17 July)

- C1) *Algorithmic methods for effective resolution of geometric and algebraic problems*  
Mohamed Elkadi & Laurent Busé (UNice)
- C2) *Applicable algebra and coding theory*  
Peter Beelen (DTU) and G.R. Pellikaan (TUE)
- C3) *Applied group theory*  
Hans Sterk (TUE)
- C4) *Groebner bases: background and applications (I)*  
Anne Fruehbis-Krueger (LUH)
- C5) *Toric geometry and applications (I)*  
Ignacio Farrán (UVa)

#### Second week (20-24 July)

- C4) *Groebner bases: background and applications (II)*  
Gerhard Pfister (Uni-KL)
- C5) *Toric geometry and applications (II)*  
Ignacio Farrán (UVa)
- C6) *Algorithmic aspects of finite semigroup and automata theory using the computer algebra system GAP*  
Manuel Delgado (UP)
- C7) *Symbolic/numeric tools for computer aided geometric design*  
David Sevilla (RICAM)
- C8) *Elliptic curves in cryptography*  
Wouter Castryck (KULeuven)

**Participation:** The school is open to all mathematicians interested in the topics covered. Postdocs, PhD students, Postgraduate (master) students and last courses graduate students from the participating institutions are encouraged to apply. The application procedure and other information may be found in the web page.

**Support:** A limited number of grants are available (63, 7 per participating institution). These grants will cover local expenses, accommodation costs of the participants during the school, daily meals, registration fee, and school materials. Check in the web page if you can apply for those grants. Partial support for travelling expenses is also available.

Possible financial help for participants from other institutions can be requested directly from the directors of the school.

Deadline for applying for support: 30 May 2009

Sponsors:



### Directors of the school:

Antonio Campillo López (SINGACOM, UVa)  
campillo@agt.uva.es

Edgar Martínez Moro (SINGACOM, UVa)  
edgar@maf.uva.es

### Participant Institutions and contact person:

UNIVERSITY OF VALLADOLID (UVa)  
Edgar Martínez Moro

DANMARKS TEKNISKE UNIVERSITET (DTU)  
Tom Høholdt

TECHNISCHE UNIVERSITÄT KAISERSLAUTERN  
(Uni-KL)  
Gerhard Pfister

LEIBNIZ UNIVERSITÄT HANNOVER (LUH)  
Anne Fruehbis-Krueger

TECHNISCHE UNIVERSITEIT EINDHOVEN (TUE)  
Arjeh Cohen

UNIVERSIDADE DO PORTO (UP)  
Manuel Delgado

UNIVERSITÉ DE NICE SOPHIA-ANTIPOLIS (UNice)  
Mohamed Elkadi

JOHANN RADON INSTITUTE FOR COMPUTATIONAL  
AND APPLIED MATHEMATICS, LINZ (RICAM)  
David Sevilla

KATHOLIEKE UNIVERSITEIT LEUVEN (KULeuven)  
Wouter Castryck

### DEADLINE

for receipt of applications

30 MAY 2009

<http://www.singacom.uva.es/Actividad/s3cm/s3cm09/>