

First Announcement and Call for Papers

Workshop on Global Integrability of Field Theories and Applications  
GIFT 2006

November 1st-3rd, 2006

Cockcroft Institute, Daresbury, UK  
<http://www.lancs.ac.uk/cockcroft-institute/>

Scope and Topics

Differential equations occupy a central place in much current research in physics and mathematics; in particular, the question of their integrability has remained an open challenge for many centuries. Since then, many tools have been developed which have a bearing on this challenge; these include aspects of algebra, geometry, topology and computer science. This interdisciplinary conference aims to bring together researchers from all these fields and to explore new avenues for their application in physics and applied mathematics. One objective is to foster links between abstract theory and the treatment of specific problems of relevance to physics and allied sciences.

Within this scope papers are invited that include (but are not restricted to) the following topics:

- Algebraic or Geometric Approaches to Differential Equations and Field Theories
- Perturbative and Asymptotic Methods
- Singularity Analysis
- Nonlinear Electrodynamics and Gauge Theories
- Constrained Dynamics
- Integrable Systems
- Local and Global Symmetries
- Differential Galois Theory
- Spencer Cohomology and Effective Homology
- Normal Forms
- Differential Algebraic Equations
- Involutive Bases

Program Committee

J. Calmet (Karlsruhe)  
B. Kruglikov (Tromsø)  
B. Malgrange (Grenoble)  
J.J. Morales Ruiz (Barcelona)  
C. Peters (Grenoble)  
E. Paul (Toulouse)

J.P. Ramis (Toulouse)  
J. Rubio (Logroño)  
W.M. Seiler (Heidelberg)  
J.A. Sanders (Amsterdam)  
F. Sergeraert (Grenoble)  
R.W. Tucker (Lancaster, Chair)

## Invited Speakers

E. Hubert (Sofia Antipolis)  
V.V. Lychagin (Tromsø)  
R.F. Streater (London)

## Conference Web Site

<http://iaks-www.ira.uka.de/iaks-calmet/gift2006/>

## Submissions

Full papers (in PDF or Postscript format) can be submitted electronically via the conference website. Papers should be written in English and should not exceed 15 pages, including tables and figures (more details on the web page). Papers must be unpublished and must not be submitted for publication elsewhere. Submissions will be formally refereed. Submission management will be done through the EasyChair portal. The proceedings will be published by Karlsruhe University Press. They ought to be available at the workshop or shortly after.

## Registration

Please use the registration form available at the conference web site.  
The registration fee is £80.00 when registering before September 15, 2006.

## Important Dates

July 1st, 2006,            submission due  
August 31st, 2006,    notification of acceptance  
September 30th, 2006, camera-ready due

## Organisation

### *Workshop Chair:*

Jacques Calmet  
Institut für Algorithmen und Kognitive Systeme  
Fakultät für Informatik  
Universität Karlsruhe  
76128 Karlsruhe, Germany  
calmet@ira.uka.de

### *Program Committee Chair:*

Robin W. Tucker  
Lancaster University  
and the Cockcroft Institute  
Lancaster  
LA1 4YB, UK  
r.tucker@lancaster.ac.uk

### *Local Organisation:*

Jonathan Gratus (j@gratus.net)  
Liz Kennedy (e.l.a.kennedy@dl.ac.uk)