

# Spring School on Classical and Quantum Mechanics

IIMAS-UNAM, 3-14 March 2008



<http://leibniz.iimas.unam.mx/~sscqm/index.html>

The Spring School will introduce the participants to modern methods of mathematical analysis for the study of classical and quantum mechanical systems. There will be eight mini-courses in the following areas of mathematical physics: scattering theory, dynamics of complex systems, and the spectral theory of the related operators. There will also be discussions in small groups about open questions and possible research topics.

The Spring School will be held at the premises of the Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas (IIMAS), located at the central campus of the Universidad Nacional Autónoma de México (UNAM).

## Invited Lecturers

### **Andreas Knauf**

Universität Erlangen-Nürnberg (Germany)

### **Ernesto Lacomba-Zamora**

Universidad Autónoma Metropolitana-Iztapalapa (México)

### **Hajo Leschke**

Universität Erlangen-Nürnberg (Germany)

### **Ernesto Pérez-Chavela**

Universidad Autónoma Metropolitana-Iztapalapa (México)

### **Hermann Schulz-Baldes**

Universität Erlangen-Nürnberg (Germany)

### **Wolfgang Spitzer**

Universität Erlangen-Nürnberg (Germany)

### **Stefan Teufel**

Universität Tübingen (Germany)

### **Ricardo Weder**

Universidad Nacional Autónoma de México (México)

## Organizers:

Rafael del Río (UNAM)

Hermann Schulz-Baldes (Univ. Erlangen-Nürnberg)

Luis Silva (UNAM)

Julio Toloza (UNAM)

Ricardo Weder (UNAM)

## Registration and Support:

Registration to attend the Spring School can be done exclusively on-line at the web page of the event; the deadline is **February 29, 2008**.

**Financial support** will be available to a limited number of students, which will cover part of the cost of lodging and local transportation. To be considered for support, the applicant should register and ask his/her advisor to send a letter by **February 15, 2008**.

## Contact at IIMAS:

### **Ana María García Ramírez,**

### **Juana Coyotzi Jaen**

(3rd floor, office 332)

Telephone and fax numbers:

(+52) (55) 56223628

(+52) (55) 56223596

## Courses

### **Andreas Knauf**

#### **Topological and Geometric Ideas in Scattering Theory**

### **Ernesto Lacomba-Zamora**

#### **Vortex Motion on Bidimensional Fluids**

### **Hajo Leschke**

#### **Some Aspects of Random Schrödinger Operators and Random Spin Hamiltonians**

### **Ernesto Pérez-Chavela**

#### **Central Configurations in Classical Mechanics**

### **Hermann Schulz-Baldes**

#### **From Random Schrödinger Operators to Random Matrices**

### **Wolfgang Spitzer**

#### **Semi-classical Analysis and the Stability of Matter**

### **Stefan Teufel**

#### **A diabatic Perturbation Theory in Quantum Dynamics**

### **Ricardo Weder**

#### **Inverse Scattering in Quantum Mechanics**

## Sponsors:

IIMAS-UNAM

CONACYT (México)

Deutscher Akademischer Austausch Dienst (Germany)



DAAD

UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO  
INSTITUTO DE INVESTIGACIONES EN MATEMÁTICAS APLICADAS Y EN SISTEMAS

Circuito Escolar, Ciudad Universitaria, Apartado Postal 20-726, Admón. No. 20, C.P. 01000, Del. Álvaro Obregón, México, D.F.