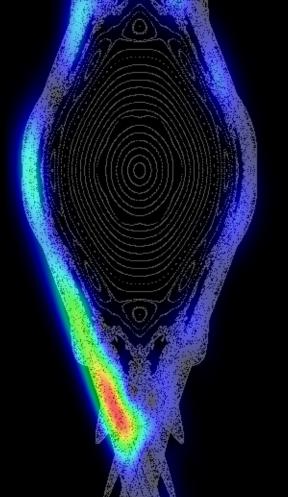
## Applications of Quantum Mechanics: Optics, Chaos, Random Matrices and Quantum Information

CIC-UNAM, Cuernavaca, July 11-22, 2011 Organizers: Thomas Gorin, Francois Leyvraz, Carlos Pineda

This summer school is intended for physics students, both advanced undergraduates and postgraduates. The lectures will cover a rather broad range of topics, from experimental quantum optics, over wave chaos and random matrix theory to quantum information and many body systems. Courses will be given by internationally recognized experts in their fields. You will have an excellent opportunity to have a closer look at the different research fields; find out about the kind of questions posed, the methods and every day routine.

For more information please contact us at cuerna 11@cicc.unam.mx or visit our website http://www.cicc.unam.mx/activities/2011/summer\_gorin



## Lectures

Fundamentals of Quantum Optics Pablo Barberis

Acoustic and Elastic Chaos Thomas Gorin

Quantum Correlations in Complex Systems Rocío Jaúregui

Discrete Phase Spaces Andrei Klimov\*

Decoherence in Quantum Computers Gustavo López\*

Scattering, absorption, and direct processes Moisés Martínez

Elastic analogs of Quantum Mechanics Rafael Mendez and Jorge Flores

Fundamentals of Quantum Information Carlos Pineda

Precision Quantum Measurements Fernando Ramírez

Quantum Chaos Thomas H. Seligman

Random Matrix Theory Vinayak

Quantum Spin Systems Marko Znidaric

\*to be confirmed











