

International Workshop

Interactions, excitations, and broken symmetries in quantum Hall systems

October 02 - 07, 2006

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Germany**Organisation:***Mandy Lochar***MPIPKS
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A quarter century after the discovery of the integer quantum Hall effect in 1980 and of the fractional quantum Hall effect in 1982, this field remains among the most active research areas of modern physics. With the progress in nanofabrication technologies, 2D electron systems in strong magnetic fields have led to the discovery of a fascinating tableau of correlated electronic states in the fractional quantum Hall regime. During the past five years or so, experimental progress has led to a wave of new discoveries, including second-generation composite fermion states, novel correlated states in bilayer systems, electronic liquid-crystal states in high Landau levels, radiation-induced zero-resistance states in very low magnetic fields, and most recently, the half-integer quantum Hall effect in graphene layers.

The goal of the workshop is to bring together leading experts in the field, including both experimentalists and theorists. Topics will include but are not limited to

- developments in composite-fermion physics
- exotic quasiparticle statistics
- electronic liquid-crystal states in high Landau levels
- Coulomb drag
- Correlated states in bilayer systems
- quantum Hall ferromagnetism
- microwave-induced zero-resistance states
- quantum Hall states of Bose-Einstein condensates
- edge states
- quantum Hall systems in unconventional symmetry classes
- quantum Hall effect in graphene

INVITED SPEAKERS INCLUDE (* TO BE CONFIRMED):

Leon M. Balents (Santa Barbara)	John T. Chalker (Oxford)	Werner Dietsche (Stuttgart)
Rui-Rui Du (Houston)	James P. Eisenstein* (California)	Ferdinand Evers (Karlsruhe)
Vladimir Falko (Lancaster)	Yuval Gefen (Rehovot)	Andre K. Geim (Manchester)
Leonid Glazman* (Minneapolis)	Vladimir J. Goldman (Stony Brook)	Igor Gornyi (Karlsruhe)
Matthew Grayson (Garching)	Rolf Haug (Hannover)	Moty Heiblum* (Rehovot)
Jainendra K. Jain (Pennsylvania)	Tierry Jolicoeur (Paris)	Woowon Kang (Illinois)
Philip Kim (New York)	Bernhard Kramer (Bremen)	Igor Kukushkin* (Moscow)
Allan H. MacDonald (Austin)	Koji Muraki (Atsugi)	Wei Pan (Albuquerque)
Aron Pinczuk (New York)	Dimitri Polyakov (Karlsruhe)	Mikhail Raikh (Salt Lake City)
Edward H. Rezayi (Los Angeles)	Maura Sasetti (Genova)	Ramamurti Shankar (New Haven)
Steven H. Simon (Murray Hill)	Jürgen H. Smet (Stuttgart)	Mansour Shayegan* (New Jersey)
Ady Stern (Rehovot)	Robert Willett (Murray Hill)	Amir Yacoby* (Rehovot)
Michael Zudov (Minneapolis)		

Application forms can be filled online on the meeting's webpage. **The deadline for applications is July 15, 2006.** The registration fee is 100 €. Costs for accommodation and meals will be covered by the Max Planck Institute for the Physics of Complex Systems.

**For further information please contact:**

Visitors Program

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