

# New Developments in Quantum Hall Effect

May 7-9, 1999

## **Friday, May 7**

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3-180 Electrical Engineering/Computer Science Building

8:15 - 9:00 a.m. Registration

9:00 - 9:05 a.m. Welcome

9:05 - 9:30 a.m. James Eisenstein, Caltech  
"New Correlation Phenomena in High Landau Levels"

9:30 - 10:00 a.m. Rui-Rui Du, University of Utah  
"Isotropic and Anisotropic Electronic Phases in Higher Landau Levels"

10:00 - 10:30 a.m. Coffee Break

10:30 - 11:00 a.m. F. Duncan Haldane, Princeton University  
"Transitions between Paired and Striped Phases in Half-filled Landau Levels"

11:00 - 11:30 a.m. Eduardo Fradkin, University of Illinois  
Electronic Liquid Crystal Phases of Quantum Hall Systems

11:30 - 1:00 p.m. Lunch, East Wing, Campus Club, 4th Floor Coffman Union

## **Afternoon Session, 3-180 Electrical Engineering/Computer Science Building**

1:00 - 1:30 p.m. Bertrand I. Halperin, Harvard University  
"Relation between the Fermion-Chern-Simons Theory and the Dipolar Quasiparticle Description of Composite Fermions."

1:30 - 2:00 p.m. Robert L. Willett, Lucent Technologies  
"Even More Fermi Surface Effects in Quantum Hall Regime"

2:00 - 2:30 p.m. Coffee Break

2:30 - 3:00 p.m. Vladimir Goldman, SUNY, Stony Brook  
"Composite Fermion Transport Near  $\nu = 1/2$ "

3:00 - 3:30 p.m. A. Pinczuk, Lucent Technologies  
"Light Scattering Spectroscopy in the Quantum Hall Regimes: Electron Liquids and Quantum Phase Transitions"

## **Saturday, May 8**

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3-180 Electrical Engineering/Computer Science Building

9:00 – 9:30 a.m. Allan MacDonald,  
The Rich World of Quantum Hall Ferromagnets

9:30 – 10:00 a.m. Sylvia Kronmüller  
The Huge Longitudinal Resistance Maximum

10:00 – 10:30 a.m. Coffee Break

10:30 – 11:00 a.m. Woowon Kang  
Spin transitions and spontaneous magnetic ordering in the fractional quantum Hall effect

11:00 – 11:30 a.m. Eugene Demler,  
Magnetic Phases of Double Layer Quantum Hall Systems

11:30 - 1:00 p.m. Lunch, East Wing, Campus Club, 4th Floor Coffman Union

### **Afternoon Session, 3-180 Electrical Engineering/Computer Science Building**

1:00 – 1:30 p.m. Danny Shahar  
The quantum-Hall to insulator transition at  $B=0$

1:30 – 2:00 p.m. Mansour Shayegan  
Transport in GaAs/AlGaAs 2D Hole Systems

2:00 – 2:30 p.m. Coffee Break

2:30 – 3:00 p.m. John Chalker  
Quantum Hall plateau transitions in disordered superconductors

3:00 – 3:30 p.m. Matthew P.A. Fisher  
Phase coherence in Quantum Hall systems and possible pairing at zero field

3:30 – 4:00 p.m. Ravindra Bhatt, TBA

## **Sunday, May 9**

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3-180 Electrical Engineering/Computer Science Building

9:00 – 9:30 a.m. Xiao-Gang Wen  
Binding transitions on FQH edges

9:30 – 10:00 a.m. Alexei Efros  
Electrostatics of Quantum Hall Liquid

10:00 – 10:30 a.m. Coffee Break

10:30 – 11:00 a.m. Nicholas Read  
TBA

11:00 – 11:30 a.m. Mikhail Fogler  
Unconventionally Sharp Dynamical Resonances from the Disordered Wigner  
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