

2021 Princeton Summer School on Condensed Matter Physics

“Novel Excitations in Correlated Materials” - June 7 - June 10 - Virtual program via Zoom Webinar

Day 1	Monday, June 7	Day 2	Tuesday, June 8
10:00-11:15am EST	Introduction by PCCM Director Prof. Ali Yazdani “Topologically Ordered Matter and Why You Should be Interested” <i>Prof. Steven Simon, Oxford University</i>	10:00-11:15am EST	“Magnons and Valley Isospin in Bilayer Graphene” <i>Prof. Jun Zhu, The Pennsylvania State University</i>
1:00-2:15pm EST	“Quantum Hall Effects in a Partially Full Landau Level: Quantized and Unquantized” <i>Prof. Bertrand Halperin, Harvard University</i>	1:00-2:15pm EST	“Exciton Condensation in Quantum Hall Bilayers: Overview” <i>Prof. James Eisenstein, CalTech</i>
2:30-3:45pm EST	“Gapless Spin Liquid and Emergent Gauge Field” <i>Prof. Patrick Lee, MIT</i>	2:30-3:45pm EST	“Quantum Hall Physics in Bilayer Systems” <i>Prof. Bertrand Halperin, Harvard University</i>
4:00-5:15pm EST	“Continuous Mott Transition and External Drive” <i>Prof. Patrick Lee, MIT</i>	4:00-5:15pm EST	“Correlated States in Ultra-Pure Oxides” <i>Prof. Joseph Falson, CalTech</i>

Visit pccm.princeton.edu for more information

Day 3

Wednesday, June 9

10:00-11:15am
EST

**“Heat Transport in
Topological Matter”**

*Prof. Dmitri Feldman,
Brown University*

1:00-2:15pm
EST

**“How Tunneling Reveals
Interlayer Correlations in
Quantum Hall Bilayers”**

*Prof. James Eisenstein,
CalTech*

2:30-3:45pm
EST

**“Excitons and Landau
Quantization in Insulators”**

*Prof. Sanfeng Wu,
Princeton University*

4:00-5:15pm
EST

**“Quantum hall bilayers with a twist:
skyrmion mediated
superconductivity”**

*Prof. Mike Zaletel,
UCB*

Day 4

Thursday, June 10

10:00-11:15 am
EST

**“Orbital magnetism in graphene
systems”**

*Prof. Andrea Young,
UCSB*

1:00-2:15pm
EST

**“Quantum Anomalous Hall Effect,
Topological Magneto-electric
Effect, and Orbital Magnetism”**

*Prof. Allan MacDonald,
UT Austin*

2:30-3:45pm
EST

“Moiré Magic 3.0”

*Prof. Pablo Jarillo-Herrero,
MIT*

4:00-5:15pm
EST

Poster Session



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