

2013 Boulder Summer School
Disorder and dynamics in quantum systems

Detailed schedule
All Lectures are in **Duane Physics Room G125**

Sunday, July 7th

6:30pm – 8:30pm Registration mixer with appetizers. Beer/wine served
WeatherTech Café in the C4C

Week 1, July 8 – 12

Monday, July 8th

8:30 – 9:00	Leo Radzihovsky <i>Welcome and Introduction</i>
9:00 – 10:30	A. Andreev <i>Field-theoretic description of disordered metals I</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	T. Giamarchi <i>One dimensional disordered systems I</i>
14:30 – 16:00	J. Chalker <i>Disorder and quantum Hall effect I</i>
16:15 – 17:15	Student introductions

Tuesday, July 9th

9:00 – 10:30	A. Andreev <i>Field-theoretic description of disordered metals II</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	T. Giamarchi

14:30 – 16:00 **J. Chalker**
One dimensional disordered systems II

19:00 – 20:00 Public lecture - **T. Giamarchi**, Duane Physics G1B30
When Magic Meets Quantum Physics

Wednesday, July 10th

9:00 – 10:30 **A. Andreev**
Field-theoretic description of disordered metals III

10:30 – 11:00 Coffee Break

11:00 – 12:30 **T. Giamarchi**
One dimensional disordered systems III

14:30 – 16:00 **J. Chalker**
Disorder and quantum Hall effect III

17:00 – 19:30 Picnic Dinner at Flagstaff Mountain with beer/wine served.
Buses will depart at 5 p.m.

Thursday, July 11th

9:00 – 10:30 **A. Andreev**
Field-theoretic description of disordered metals IV

10:30 – 11:00 Coffee Break

11:00 – 12:30 **T. Giamarchi**
One dimensional disordered systems IV

14:30 – 16:00 **J. Chalker**
Disorder and quantum Hall effect IV

Friday, July 12th

9:00 – 10:30 **M. Raikh**
Hopping transport in disordered systems I

10:30 – 11:00 Coffee Break

11:00 – 12:30 **D. Delande**
Kicked rotor and Anderson localization I

14:30 – 16:00 **D. Delande**
Kicked rotor and Anderson localization II

18:00 – 19:00 **BBQ** Dirks East Courtyard - C4C

Week 2, July 15 – 19

Monday, July 15th

9:00 – 10:30	D. Delande <i>Kicked rotor and Anderson localization III</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	L. Glazman <i>Weak interactions and disorder in 0D, 1D, and higher dimensions I</i>
14:30 – 16:00	M. Raikh <i>Hopping transport in disordered systems II</i>
16:00 – 17:00	Poster Talks I

Tuesday, July 16th

9:00 – 10:30	L. Glazman <i>Weak interactions and disorder in 0D, 1D, and higher dimensions II</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	G. Refael <i>Real space RG I</i>
14:30 – 16:00	L. Glazman <i>Weak interactions and disorder in 0D, 1D, and higher dimensions III</i>
19:00 – 21:30	Poster Session I <i>11th floor Commons Room</i>

Wednesday, July 17th

9:00 – 10:30	G. Refael <i>Real space RG II</i>
10:30 – 11:00	Coffee Break

11:00 – 12:30

M. Raikh

Hopping transport in disordered systems III

14:30 – 16:00

T. Vojta

Phase transitions, disorder, and Griffiths singularities I

Thursday, July 18th

9:00 – 10:30

G. Refael

Real space RG III

10:30 – 11:00

Coffee Break

11:00 – 12:30

M. Raikh

Hopping transport in disordered systems IV

14:30 – 16:00

T. Vojta

Phase transitions, disorder, and Griffiths singularities II

Friday, July 19th

9:00 – 10:30

T. Vojta

Phase transitions, disorder, and Griffiths singularities III

10:30 – 11:00

Coffee Break

11:00 – 12:30

G. Refael

Real space RG IV

14:30 – 16:00

Seminar

18:00 – 19:00

BBQ Dirks East Courtyard - C4C

Week 3, July 22 – 26

Monday, July 22th

9:00 – 10:30	T. Vojta <i>Phase transitions, disorder, and Griffiths singularities IV</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	A. Altland <i>Introduction to symmetry classes I</i>
14:30 – 16:00	D. Huse <i>Many body localization and thermalization I</i>
19:00 – 21:30	Poster Talks II

Tuesday, July 23th

9:00 – 10:30	A. Kamenev <i>Field theory approach to nonequilibrium systems I</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	A. Altland <i>Introduction to symmetry classes II</i>
14:30 – 16:00	D. Huse <i>Many body localization and thermalization II</i>
19:00 – 21:30	Poster Session II <i>11th Floor Commons Room</i>

Wednesday, July 24th

9:00 – 10:30	A. Altland <i>Introduction to symmetry classes III</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	A. Kamenev <i>Field theory approach to nonequilibrium systems II</i>
14:30 – 16:00	D. Huse <i>Many body localization and thermalization III</i>

Thursday, July 25th

9:00 – 10:30

A. Altland

Introduction to symmetry classes IV

10:30 – 11:00

Coffee Break

11:00 – 12:30

D. Huse

Many body localization and thermalization IV

14:30 – 16:00

A. Altland

Introduction to symmetry classes V

Friday, July 26th

9:00 – 10:30

A. Kamenev

Field theory approach to nonequilibrium systems III

10:30 – 11:00

Coffee Break

11:00 – 12:30

A. Kamenev

Field theory approach to nonequilibrium systems IV

14:30 – 16:00

D. Stamper-Kurn

Non-equilibrium dynamics in quantum gases I

18:00 – 19:00

BBQ Dirks East Courtyard - C4C

Week 4, July 29 – August 2

Monday, July 29th

- 9:00 – 10:30 **A. Mirlin**
Quantum transport in disordered systems: localization, interaction, symmetries, and topologies I
- 10:30 – 11:00 Coffee Break
- 11:00 – 12:30 **E. Cornell**
Strongly interacting quenched Bose gas I
- 14:30 – 16:00 **D. Stamper-Kurn**
Non-equilibrium dynamics in quantum gases II
- 16:00 – 17:00 **Poster Talks III**

Tuesday, July 30th

- 9:00 – 10:30 **A. Mirlin**
Quantum transport in disordered systems: localization, interaction, symmetries and topologies II
- 10:30 – 11:00 Coffee Break
- 11:00 – 12:30 **C. Kollath**
Dynamics in ultracold atomic gases I
- 14:30 – 16:00 **E. Cornell**
Strongly interacting quenched Bose gas II
- 19:00 – 21:30 **Poster Session III**
11th Floor Commons Room

Wednesday, July 31th

- 9:00 – 10:30 **A. Mirlin**
Quantum transport in disordered systems: localization, interaction, symmetries and topologies III
- 10:30 – 11:00 Coffee Break
- 11:00 – 12:30 **A. Polkovnikov**
Quantum mechanics in classical phase space I

14:30 – 16:00

C. Kollath

Dynamics in ultracold atomic gases II

Thursday, August 1st

9:00 – 10:30

A. Mirlin

Quantum transport in disordered systems: localization, interaction, symmetries and topologies IV

10:30 – 11:00

Coffee Break

11:00 – 12:30

A. Polkovnikov

Quantum mechanics in classical phase space II

14:30 – 16:00

C. Kollath

Dynamics in ultracold atomic gases III

18:00 – 19:00

BBQ Dirks East Courtyard - C4C

Friday, August 2nd

9:00 – 10:30

A. Polkovnikov

Quantum mechanics in classical phase space III

10:30 – 11:00

Coffee Break

11:00 – 12:30

What did we learn in this course?