
Week 1, July 1 – 5, 2024

Sunday, June 30th

18:30 – 20:30 **Registration mixer with refreshments**
location TBD

Monday, July 1st

8:30 – 9:00 **Organizers**
Welcome and School Introduction

9:00 – 10:30 **W. Jacobs**
Biomolecular Condensates

10:30 – 11:00 Coffee break – questions / interaction with speaker

11:00 – 12:30 **M. Deserno**
Membrane Elasticity and Thermodynamics

12:30 – 13:45 Lunch

14:00 – 15:30 **P. Bassereau**
Protein self-organization

15:30 – 17:00 **Participant Introductions**

18:30 – 18:55 **Poster Blurbs I**
Duane G130

19:00 – 22:00 **Poster Session I**
11th Floor Commons Room, Gamow Tower

Tuesday, July 2nd

9:00 – 10:30 **W. Jacobs**
Biomolecular Condensates

10:30 – 11:00 Coffee break

11:00 – 12:30 **M. Deserno**
Membrane Elasticity and Thermodynamics

12:30 – 13:45 Lunch

14:00 – 15:30 **P. Bassereau**
Protein self-organization

18:00 – 20:30 **Dessert on Flagstaff Mountain**
Busses leave south of C4C at 6pm

Self-Organizing Matter July 1 – July 26, 2024

Detailed Schedule All lectures are in Duane Physics Room G130

Wednesday, July 3rd

9:00 – 10:30	W. Jacobs <i>Biomolecular Condensates</i>
10:30 – 11:00	Coffee break
11:00 – 12:30	M. Das <i>Mechanical transitions in cells and tissues</i>
12:30 – 13:45	Lunch
14:00 – 15:30	E. Matsumoto <i>Geometry of shape change</i>
15:30 – 15:45	Break
15:45 – 17:15	Problem solving session – A. Saric

Thursday, July 4th

9:00 – 10:30	M. Das <i>Mechanical transitions in cells and tissues</i>
10:30 – 11:00	Coffee break
11:00 – 12:30	M. Deserno <i>Membrane Elasticity and Thermodynamics</i>
12:30 – 13:45	Lunch
14:00 – 15:30	E. Matsumoto <i>Geometry of shape change</i>

Friday, July 5th

9:00 – 10:30	E. Matsumoto <i>Geometry of shape change</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	M. Das <i>Mechanical transitions in cells and tissues</i>
12:30 – 13:45	Lunch
14:00 – 15:30	Problem solving / What have we learned this week? – A. Saric
19:00 – 21:30	Catered dinner <i>11th Floor Commons Room, Gamow Tower</i>

Week 2, July 8 – 12, 2024

Monday, July 8th

9:00 – 10:30	M.C. Marchetti <i>Dense active matter</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	N. Mitchell <i>Mechanics of morphogenesis</i>
12:30 – 13:45	Lunch
14:00 – 15:30	D. Zwicker <i>Chemically active droplets</i>
18:30 – 18:55	Poster Blurbs II <i>Duane G130</i>
19:00 – 22:00	Poster Session II <i>11th Floor Commons Room, Gamow Tower</i>

Tuesday, July 9th

9:00 – 10:30	M.C. Marchetti <i>Dense active matter</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	N. Mitchell <i>Mechanics of morphogenesis</i>
12:30 – 13:45	Lunch
14:00 – 15:30	D. Zwicker <i>Chemically active droplets</i>
18:30 – 18:55	Poster Blurbs III <i>Duane G130</i>
19:00 – 22:00	Poster Session III <i>11th Floor Commons Room, Gamow Tower</i>

Wednesday, July 10th

Self-Organizing Matter July 1 – July 26, 2024

Detailed Schedule All lectures are in Duane Physics Room G130

9:00 – 10:30	D. Zwicker <i>Chemically active droplets</i>
10:30 – 11:00	Coffee break
11:00 – 12:30	N. Mitchell <i>Mechanics of morphogenesis</i>
12:30 – 13:45	Lunch
14:00 – 15:30	K. Wan <i>Out-of-equilibrium dynamics and organization of active filaments</i>
15:30 – 15:45	Break
15:45 – 17:15	Problem solving session – M. Gardel

Thursday, July 11th

9:00 – 10:30	M.C. Marchetti <i>Dense active matter</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	K. Wan <i>Out-of-equilibrium dynamics and organization of active filaments</i>
12:30 – 13:45	Lunch
14:00 – 15:30	M. Prakash <i>TBD</i>

Friday, July 12th

9:00 – 10:30	K. Wan <i>Out-of-equilibrium dynamics and organization of active filaments</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	M. Prakash <i>TBD</i>
12:30 – 13:45	Lunch
14:00 – 15:30	Problem solving / What have we learned this week? – M. Gardel

Week 3, July 15 – 19, 2024

Monday, July 15th

9:00 – 10:30	U. Schwarz <i>Active contractility of adherent cells</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	M. Manning <i>Emergent mechanical properties of biological tissues</i>
12:30 – 13:45	Lunch
14:00 – 15:30	M. Murrell <i>Energetic constraints on biological assembly and motion</i>
19:00 – 20:00	Public Lecture: M. Prakash <i>Duane Physics G1B20</i>

Tuesday, July 16th

9:00 – 10:30	U. Schwarz <i>Active contractility of adherent cells</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	M. Manning <i>Emergent mechanical properties of biological tissues</i>
12:30 – 13:45	Lunch
14:00 – 15:30	M. Murrell <i>Energetic constraints on biological assembly and motion</i>

Wednesday, July 17th

9:00 – 10:30	J. Yeomans <i>Active matter models of mechanobiology</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	M. Manning <i>Emergent mechanical properties of biological tissues</i>
12:30 – 13:45	Lunch
14:00 – 15:30	M. Murrell <i>Energetic constraints on biological assembly and motion</i>
15:30 – 15:45	Break
15:45 – 17:15	Problem solving session – S. Banerjee

Self-Organizing Matter July 1 – July 26, 2024

Detailed Schedule All lectures are in Duane Physics Room G130

Thursday, July 18th

9:00 – 10:30

J. Yeomans

Active matter models of mechanobiology

10:30 – 11:00

Coffee Break

11:00 – 12:30

U. Schwarz

Active contractility of adherent cells

12:30 – 13:45

Lunch

14:00 – 15:30

E. Hannezo

Collective cell migration

Friday, July 19th

9:00 – 10:30

J. Yeomans

Active matter models of mechanobiology

10:30 – 11:00

Coffee Break

11:00 – 12:30

E. Hannezo

Collective cell migration

12:30 – 13:45

Lunch

14:00 – 15:30

Problem solving / What have we learned this week?

– S. Banerjee

Week 4, July 22 - July 26, 2024

Monday, July 22nd

9:00 – 10:30	Y. Mao <i>Tissue growth, repair and morphogenesis</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	I. Cohen <i>Viscosity metamaterials, biological tissues and microscopic robots</i>
12:30 – 13:45	Lunch
14:00 – 15:30	A. Liu <i>Learning metamaterials</i>

Tuesday, July 23rd

9:00 – 10:30	Y. Mao <i>Tissue growth, repair and morphogenesis</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	I. Cohen <i>Viscosity metamaterials, biological tissues and microscopic robots</i>
12:30 – 13:45	Lunch
14:00 – 15:30	A. Liu <i>Learning metamaterials</i>

Wednesday, July 24th

9:00 – 10:30	D. Durian <i>Autonomous learning metamaterials</i>
10:30 – 11:00	Coffee Break
11:00 – 12:30	V. Vitelli <i>TBD</i>
12:30 – 13:45	Lunch
14:00 – 15:30	A. Liu <i>Learning metamaterials</i>
15:30 – 15:45	Break
15:45 – 17:15	Problem solving session – E. Dufresne

Self-Organizing Matter July 1 – July 26, 2024

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Thursday, July 25th

9:00 – 10:30

D. Durian

Autonomous learning metamaterials

10:30 – 11:00

Coffee Break

11:00 – 12:30

V. Vitelli

TBD

12:30 – 13:45

Lunch

14:00 – 15:30

I. Cohen

Viscosity metamaterials, biological tissues and microscopic robots

Friday, July 26th

9:00 – 10:30

D. Durian

Autonomous learning metamaterials

10:30 – 11:00

Coffee Break

11:00 – 12:30

V. Vitelli

TBD

12:30 – 13:45

Lunch

14:00 – 15:00

What have we learned this month? – E. Dufresne