MONDAY MARCH 13, 2017

Session A (8AM – 11AM)

A3. Physics of Liquids I -- Multicomponent Liquids and Solvation, Rm. 262
A6. Focus Self-organization in Bacteria Colonies and Suspensions, Rm. 265
A14. Focus Jamming of Particulate Matter I, Rm. 273
A15. Focus Geometry and Topology in Mechanics, Rm. 274
A46. Focus Entanglement in Open Quantum Systems, Rm. 393
A49. Invited Physics of Collective Cell Migration, Rm. 396

Session B (11:15AM – 2:15PM)

B14. Award GSNP Student and Post-doctoral Speaker Awards Session, Rm. 273
B15. Mechanics of Granular Materials, Rm. 274
B16. Mechanical Singularities in Soft Matter I, Rm. 275
B49. Invited Active Matter: Recent Theoretical Advances, Rm. 396

Session C (2:30PM – 5:30PM)

C14. Focus Statistical Mechanics of Active Matter, Rm. 273
C15. Focus Extreme Mechanics of Shells, Rm. 274
C16. Focus Session: Mechanical Singularities in Soft Matter II, Rm. 275
C29. Invited Mesoscale Structure in Particulate-based Systems, Rm. 292
TUESDAY MARCH 14, 2017

Session E (8:00AM – 11:00AM)
E3. Physics of Liquids II -- Multicomponent and Charged Fluids, Rm. 262
E9. **Focus** Glass Formation and Dynamics in Nanostructured Polymers and Glasses I, Rm. 268
E14. **Focus** Symmetries, Spatiotemporal Patterns and Synchronization, Rm. 273
E15. Extreme Mechanics, Rm. 274
E29. **Invited** Jamming of Frictional and Non-spherical Particles, Rm. 292

Session F (11:15AM – 2:15PM)
F4. **Focus** Physics of Genome Organization: from DNA to Chromatin I, Rm. 263
F10. **Focus** Ion Containing Polymers - The Role of Structure and Dynamics I, Rm. 269
F12. **Focus** Natural Pattern Formation and Earth's Climate System, Rm. 271
F14. Jamming of Particulate Matter II, Rm. 273
F15. **Focus** Population Ecology and Evolutionary Dynamics, Rm. 274
F17. **Focus** Organization of Soft Materials Far from Equilibrium, Rm. 276
F40. **Invited** Patterns of Network Synchronization, Rm. 387

Session G (2:00PM – 5:00PM)
G1. Poster Session I, Exhibit Hall J

Session H (2:30PM – 5:30PM)
H4. **Focus** Specificity, Recognition and Coding in Biology, Rm. 263
H12. Swimming, Motility and Locomotion, Rm. 271
H14. **Focus** Collective Dynamics: Fluid Physics of Life, Rm. 273
H15. Complex Networks and their Applications, Rm. 274
H18. **Focus** Function from Geometry: 3D Printing to Programmable Matter I, Rm. 277
H21. **Invited** Extreme Events in a Changing Climate, Rm. 281-282
H40. **Invited** Soft Excitations in Glasses and Jammed Solids, Rm. 387

Session J (5:45PM – 6:45PM)
J15. **GSNP business meeting**, Rm. 274
WEDNESDAY MARCH 15, 2017

Session K (8:00AM – 11:00AM)

K4. Active Living Matter, Rm. 263
K5. Focus Physical Properties of Bacterial Cytoplasm, Rm. 264
K9. Focus Glass Formation and Dynamics in Nanostructured Polymers and Glasses II, Rm. 268
K10. Focus Ion Containing Polymers - The Role of Structure and Dynamics II, Rm. 269
K14. Focus Mechanical Metamaterials I, Rm. 273
K15. Focus Complex phases: Colloids and Quasicrystals, Rm. 274
K49. Invited Physics of Neural Network Dynamics in the Brain, Rm. 396
K52. Focus Thermodynamics and Thermalization in Quantum Information Theory, Rm. 399

Session L (11:15AM – 2:15PM)

L24. Invited Award Frontiers in Theory: Joint DCMP/DCOMP/GSNP Prize Session, New Orleans Theater C
L52. Statistics of Ensemble Quantum Systems, Rm. 399

Session P (2:30PM – 5:30PM)

P5. Focus Non-equilibrium Dynamics of Neural Circuits, Rm. 264
P14. Mechanical Metamaterials II, Rm. 273
P15. Granular Matter, Rm. 274
P16. Active Matter Under Confinement I, Rm. 275
P21. Invited Soft Tribute to John Cahn, Rm. 281-282
THURSDAY MARCH 16, 2017

Session R (8:00AM – 11:00AM)

R14.  Active Matter and Self-propelled Particles, *Rm. 273*
R15.  Chaos and Nonlinear Dynamics, *Rm. 274*
R49.  Invited Mechanics in Morphogenesis, *Rm. 396*

Session S (11:15AM – 2:15PM)

S5.  Focus Machine Learning for Modeling and Control of Biological Systems I, *Rm. 264*
S12.  Turbulence and Multi-Phase Flows, *Rm. 271*
S14.  Active Colloids, *Rm. 273*
S15.  Spins and Complex Systems, *Rm. 274*
S16.  Focus Physics of Liquids III -- Glasses, *Rm. 275*
S19.  Invited Nanothermodynamics and Quantum Information, *Rm. 278-279*

Session V (2:30PM – 5:30PM)

V5.  Focus Physics of Cellular Organization, *Rm. 264*
V14.  Focus Noise and Stochastic Fluctuations in Biological Systems, *Rm. 273*
V15.  General Statistical and Nonlinear Physics, *Rm. 274*
V16.  Focus Active Matter Under Confinement II, *Rm. 275*
V18.  Focus Function from Geometry: 3D Printing to Programmable Matter II, *Rm. 277*
FRIDAY MARCH 17, 2017

Session X (8:00AM – 11:00AM)

X12. Focus Robophysics I, Rm. 271
X18. Focus Continuum Descriptions of Discrete Materials, Rm. 277
X29. Invited The Butterfly Plot Turns 40, Rm. 292
X49. Invited Robot Scientists and Machine Learning for Automated Modeling and Control of Complex Systems, Rm. 396
X52. Many-Body Physics in Quantum Information Theory, Rm. 399

Session Y (11:15PM – 2:15PM)

Y12. Focus Robophysics II, Rm. 271
Y14. Focus Machine Learning for Modeling and Control of Biological Systems II, Rm. 273
Y52. Non-equilibrium Thermodynamics in Quantum Information Theory, Rm. 399
# Session B14: GSNP Student and Post-doctoral Speaker Awards Session

**Sponsoring Units:** GSNP  
**Chair:** Christian Santangelo, University of Massachusetts, Amherst  
**Room:** 273

<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Session Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15AM - 11:27AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, March 13, 2017</td>
<td>B14.00002: A change in stripes for cholesteric shells via modulated anchoring</td>
<td>Lisa Tran, Maxim Lavrentovich, Guillaume Durey, Alexandre Darmon, Martin Haase, Ningwei Li, Daeyeon Lee, Kathleen Stebe, Randall Kamien, Teresa Lopez-Leon</td>
</tr>
<tr>
<td>11:27AM - 11:39AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, March 13, 2017</td>
<td>B14.00003: Using particle rearrangement statistics to quantify ductility in amorphous solids</td>
<td>Meng Fan, Minglei Wang, Yanhui Liu, Jan Schroers, Mark Shattuck, Corey O’Hern</td>
</tr>
<tr>
<td>11:39AM - 11:51AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, March 13, 2017</td>
<td>B14.00004: From microscopic rules to macroscopic dynamics with active colloidal snakes.</td>
<td>Jie Zhang, Jing Yan, Steve Granick</td>
</tr>
<tr>
<td>11:51AM - 12:03PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:03PM - 12:15PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:15PM - 12:27PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, March 13, 2017</td>
<td>B14.00007: Jamming transition in granular systems of regular polygons</td>
<td>Ceccey Stevens Bester, Yiqiu Zhao, Jonathan Bares, Yuanyuan Xu, Meredith Cox, Robert Behringer</td>
</tr>
<tr>
<td>12:27PM - 12:39PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:39PM - 12:51PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, March 13, 2017</td>
<td>B14.00009: Improving Self-Assembly by Varying the Temperature Periodically with Time</td>
<td>Oren Raz, Christopher Jarzynski</td>
</tr>
<tr>
<td>12:51PM - 1:03PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday, March 13, 2017</td>
<td>B14.00010: Stochastic thermodynamics and fluctuation theorems of active Brownian dynamics</td>
<td>Dibyendu Mandal, Katherine Klymko</td>
</tr>
<tr>
<td>1:03PM - 1:15PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:15PM - 1:27PM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>