

The 2018 Berkeley Statistical Mechanics Meeting
January 12 – 14, 2018

Friday, January 12, 2018

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| 2:00 pm | Registration & Check-In | Bixby Commons |
| 4:00 pm | Poster Session I - Two-minute Talks David Limmer Presiding | 120 Latimer Hall |
| 5:00 pm | Poster Session I - Discussions & Light Reception | Tan Hall Lobby |

Saturday, January 13, 2018

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| 7:45 am | Breakfast | Tan Hall Lobby |
| 8:45 am | Introductory Remarks Phill Geissler | 120 Latimer Hall |

Saturday Lecture Session I – Discussion chair: Tom Miller **120 Latimer Hall**

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| 9:00 am | Christoph Dellago, University of Vienna <i>“Simulating water and ice with neural network potentials”</i> | |
| 9:30 am | Adam Willard, Massachusetts Institute of Technology <i>“The statistical mechanics of hydrogen bonding at the liquid water interface”</i> | |
| 10:00 am | Susan Perkin, University of Oxford <i>“Puzzling lengthscales and timescales in ionic liquids and concentrated electrolytes”</i> | |
| 10:30 am | Coffee Break | Tan Hall Lobby |

Saturday Lecture Session II – Discussion chair: Lutz Maibaum **120 Latimer Hall**

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| 10:45 am | Primož Ziherl, University of Ljubljana <i>“Bronze-mean hexagonal quasicrystal”</i> | |
| 11:15 am | Ludovic Berthier, Université de Montpellier <i>“Equilibrium simulations of supercooled liquids beyond laboratory timescales”</i> | |
| 11:45 am | Bulbul Chakraborty, Brandeis University <i>“Theory of Force Transmission and Rigidity in Granular Systems”</i> | |

12:15 pm Lunch 775 Tan Hall

Saturday Lecture Session III – Discussion chair: Mike Hagan 120 Latimer Hall

2:00 pm **Eric Vanden-Eijnden, New York University**
“Spatiotemporal self-organization of fluctuating bacterial colonies”

2:30 pm **Maggie Johnson, Johns Hopkins University**
“Protein self-assembly in the cell: Spatial and temporal control through membrane localization”

3:00 pm **Massimo Vergassola, University of California, San Diego**
“Mitotic waves in the early embryogenesis of Drosophila: bistability traded for speed”

3:30 pm **Coffee Break Tan Hall Lobby**

Saturday Lecture Session IV – Discussion chair: John Wheeler 120 Latimer Hall

3:45 pm **Lenka Zdeborova, Institut de Physique Theorique**
“Statistical Mechanics of Learning a Rule: Decades Old Story Continued”

4:15 pm **Daan Frenkel, University of Cambridge**
“Out of my depth: all the things I would have liked to ask David Chandler”

5:00 pm **Poster Session II – Two minute talks 120 Latimer Hall**

6:00 pm **Poster Session II – Discussions & Light Reception Tan Hall Lobby**

Sunday, January 14, 2018

7:45 am **Breakfast Tan Hall Lobby**

Sunday Lecture Session I – Discussion chair: Ehud Altman 120 Latimer Hall

9:00 am **Felix von Oppen, Freie Universität Berlin**
“Quantum thermodynamics of strongly coupled open quantum systems”

9:30 am **Assa Auerbach, Israel Institute of Technology**
“The Kagome Antiferromagnet: A Quantum Spin liquid with p6 Chirality”

10:00 am **Eugene Demler, Harvard University**

“Quantum nonequilibrium: from photoinduced superconductivity to the Higgs laser”

10:30 am **Coffee Break**

Tan Hall Lobby

Sunday Lecture Session II – Discussion chair: Suri Vaikuntanathan

120 Latimer Hall

10:45 am **Pablo Hurtado, Universidad de Grenada**

“Phase transitions in the fluctuations of driven systems”

11:15 am **Kazumasa Takeuchi, Tokyo Institute of Technology**

“Flat growth vs circular growth: implications for interfaces and beyond”

11:45 am **Michael Woodside, University of Alberta**

“Measuring transition paths in the folding of single biological molecules”

12:15 pm **Closing Remarks: Phill Geissler**

12:30 pm **Dim Sum Party**

775 Tan Hall