Berkeley Statistical Mechanics Meeting
Friday, Jan. 11, 2019 – Poster Session I

#	Name	Institution	Title of poster
1	Chen, Ming	UC Berkeley	Overlapped embedded fragment stochastic density functional theory for covalently bonded materials
2	Das, Akshaya	UC Berkeley	Improvements to the AMOEBA force field by introducing anisotropic atomic polarizability of the water molecule
3	David, Philippe	University of Utah	Representing high dimensional perovskite potential energy surfaces with artificial neural networks
4	Dinpajooh, Hadi	University of Oregon	Integral equation coarse-graining method: Multi-resolution simulations
5	DuBay, Kateri	University of Virginia	Modeling the influence of emergent behaviors among nascent oligomers on step-grown copolymer sequences
6	Frechette, Layne	UC Berkeley	Elastic phase behavior significantly biases the kinetics of model ion-exchange reactions
7	Fu, Ray	Northwestern University	Periodic driving in a two-dimensional ratchet
8	Galib, Mirza	UC Berkeley	Developing a reactive force field using machine learning for the decomposition of N_2O_5 in bulk water
9	Gao, Chloe	UC Berkeley	Nonlinear transport coefficients from large deviation functions
10	Hasyim, Muhammad	UC Berkeley	Statistical mechanics of crystallization and vitrification
11	Hocky, Glen	New York University	Mechanical and kinetic factors drive sorting of F-actin crosslinkers on bundles
12	Jin, Jaehyeok	University of Chicago	Ultra-coarse-graining the complex condensed matters: From interfaces to hydrogen bonding
13	Kedia, Hridesh	Massachusetts Institute of Technology	Dynamical fine-tuning to external forcing in disordered networks of bistable springs
14	Lee, Jaehak	Seoul National University	Trajectory probability and entropy of stochastic spin-lattice models
15	Liao, Zhenghan	University of Chicago	Rectification in non-equilibrium gyroscopic networks
16	Marzen, Sarah	Massachusetts Institute of Technology	Prediction and dissipation in nonequilibrium sensors

17	Merz, Steven	University of Virginia	Investigations of nanoparticle monolayer self-assembly: Integrating MALDI-MS experiments with configurationally biased Monte Carlo simulations
18	Mullen, Ryan	Lawrence Livermore National Laboratory	Spin-lattice model of plutonium hydride nucleation
19	Niblett, Samuel	UC Berkeley	Effects of random pinning on the potential energy landscape of a supercooled liquid
20	Niblo, Jessica	University of Virginia	Shifting self-assembly through oscillations of inter-particle interactions
21	Park, Gyehyun	Seoul National University	Many-chain effect on the co-nonsolvency behavior of polymer brush in a good solvent mixture
22	Ruiz Pestana, Luis	Lawrence Berkeley National Laboratory	Accurate water properties from semilocal functionals
23	Sanyal, Tanmoy	UC San Francisco	Coarse-grained models for protein folding and self-assembly with the relative entropy
24	Soligno, Giuseppe	Utrecht University	Understanding the formation of PbSe honeycomb superstructures by dynamics simulations
25	Suematsu, Ayumi	Kyushu University	Dependence of effective interaction between like charged colloidal particles on co-ion charge in an electrolyte solution: An analysis using HNC-OZ theory
26	Takatori, Sho	UC Berkeley	Active glass and buckling of bacterial colonies
27	Vroylandt, Hadrien	Northwestern University	Non equivalence of dynamical ensembles and emergent non ergodicity
28	Wagoner, Jason	Stony Brook University	The biological catch bond suppresses fluctuations in nonequilibrium systems
29	Wang, Qiaoyi	University of Utah	Responsive membranes from self-assembly of polymer-grafted nanoparticles
30	Widmer-Cooper, Asaph	University of Sydney	Colloidal stability of apolar nanoparticles
31	Wrona, Paul	UC Berkeley	Studying the classical liquid-to-gas phase transition of indirect excitons
32	Yoshimori, Akira	Niigata University	Microscopic expressions of boundary conditions in Stokes' law
33	Zhang, Zhongmin	University of Virginia	Investigating how nascent oligomer geometries and spatial heterogeneities influence the sequences of step-growth copolymers

Berkeley Statistical Mechanics Meeting
Saturday, Jan. 12, 2019 – Poster Session II

#	Name	Institution	Title of poster
1	Batton, Clay	UC Berkeley	Orderphobic effect of proteins in multicomponent membranes
2	Chen, Ming	UC Berkeley	Unfolding hidden barriers by active enhanced sampling
3	Cheng, Lixue Sherry	California Institute of Technology	Transferability in machine learning for electronic structure via the molecular orbital basis
4	Cline, Peyton	University of Colorado Boulder	Mechanisms of carrier diffusion–annihilation in cadmium chalcogenide nanocrystals
5	Das, Avishek	UC Berkeley	Variational estimation of large deviation functions
6	Dasbiswas, Kinjal	UC Merced	How mechanical forces order molecular motors in the noisy interior of cells
7	Del Junco, Clara	University of Chicago	High chemical affinity increases the robustness of biochemical oscillations
8	Ekeh, Timothy	University of Cambridge	Thermodynamic cycles with active fluids
9	Epstein, Jeff	UC Berkeley	Equations of hydrodynamics for active Brownian particles
10	Fan, Zhaochuan	University of Utah	Self-assembly of heteronanocrystals
11	Grand Pre, Trevor	UC Berkeley	Current and work fluctuations for active Brownian particles
12	Helms, Phillip	California Institute of Technology	Large deviation functions via quantum tensor network methods
13	Jacobson, Daniel	California Institute of Technology	Sampling rate functions using a variational ansatz for rare dynamics
14	Johnson, Margaret	Johns Hopkins University	Modeling nonequilibrium self-assembly in the cell through reaction-diffusion simulation
15	Karnes, John	Lawrence Livermore National Laboratory	An atomistic approach toward modeling additive manufacturing
16	Kim, Jeongmin	California Institute of Technology	Lithium electroreduction at polymer-metal interfaces during battery charge process
17	Korol, Roman	California Institute of Technology	Principles of charge transport in DNA: From extensive simulations to neural networks

18	Lee, Sebastian	California Institute of Technology	Analytical nuclear gradients for projection-based wavefunction-in-DFT embedding
19	Leitold, Christian	UC Santa Barbara	Identifying a solvent coordinate for an SN2 reaction
20	Magdau, Ioan	California Institute of Technology	2D THz-THz-Raman spectroscopy in bromoform
21	Menzl, Georg	UC Berkeley	Solvent density fluctuations: A pathway to membrane fusion?
22	Monroe, Jacob	UC Santa Barbara	Chemical patterning of heterogeneous surfaces induces unique dynamics of hydration water
23	Odendahl, Nathan	UC Berkeley	Water's surface structure dictates its interfacial properties
24	Rogers, Julia	UC Berkeley	Trajectory based analysis is essential for understanding lipid exchange
25	Rosa, Jorge	California Institute of Technology	Path-accelerated molecular dynamics: Extending simulation timescales by parallelizing in time
26	Rotskoff, Grant	New York University	Neural networks as interacting particle systems
27	Satish, Pratima	UC Berkeley	Understanding ligand ordering phase transitions on nanoparticle surfaces
28	Scherck, Nick	UC Santa Barbara	Integrated field-theoretic and particle simulations: Computer-aided material design
29	Schile, Addison	UC Berkeley	Studying rare nonadiabatic dynamics with transition path sampling quantum jump trajectories
30	Shushkov, Philip	California Institute of Technology	Dynamics of direct O_2 formation in hyperthermal collisions of CO_2 with a gold surface
31	Strong, Steven	University of Chicago	Hydrogen bonding in supercritical water
32	Tao, Xuecheng	California Institute of Technology	Path-integral isomorphic Hamiltonian: Including nuclear quantum effects in non-adiabatic dynamics
33	Welborn, Matthew	California Institute of Technology	Balancing the description of subsystems in wavefunction-in-DFT and DFT-in-lower embedding
34	Zimmer, Matthew	California Institute of Technology	Force transduction creates long-ranged coupling in SecM-stalled ribosomes
35	Cheng, Sara	UC Berkeley	Uncovering the role of pi-contacts in liquid-liquid phase separation of intrinsically disordered proteins