

#	Name	Title of presentation
1	Pengchen Ma	Mechanism studies in the De novo design of luciferases using deep learning
2	Mojgan Asadi	Understanding electrostatic effects in the function of biological systems
3	Tatiana Mamani	Oxygen Vacancy induced ferroelectric behavior in (111) SrTiO ₃ photoelectrodes for water oxidation
4	Mitra Rooein	Calculation of g-tensor and hyperfine coupling for photochromic copper complex
5	James Shee	Exploring new frontiers in transition metal quantum chemistry: Synergies between AFQMC, symmetry breaking, and CCSD(T)
6	Liangyue (Willa) Wang	Toward improved electrostatics in molecular dynamics: SMIRNOFF polarizabilities, bond charge corrections, and direct polarization
7	Karnamohit Ranka	Size-Dependent Errors in Real-Time Electron Density Propagation
8	Frank Cerasoli	High-throughput discovery of electron-precise clathrates and their superstructural ordering through machine learning
9	Alexander Chang	Understanding Biases within Reaction Discovery Methods using the ab initio Nanoreactor
10	Jessica Flowers	Beyond the Traditional Force Field: Improving IDP Conformer Sampling Through Dihedral Parameter Optimization
11	Brianna Aguilar-Solis	Approximating excited electronic states with spin-corrected self-consistent field methods
12	Siddharth Sonti	Elucidating the Fluxionality and Dynamics of Zeolite-Confined Au Nanoclusters Using Machine Learning Potentials
13	Ilya Dergachev	Modeling Quantum Tunneling in Nonadiabatic Statistical Theory
14	Yuanheng Wang	Ab Initio Interactive Molecular Dynamics with Accelerated Electron Repulsion Integrals
15	Daria Nakritskaia	Spin-vibrational resonances in molecular magnets in different environments
16	Austin Atsango	Machine-learned potentials capturing both aqueous excess protons and hydroxide ions for use with classical or quantum nuclei
17	Brittany Harding	Using the generalized thermal adiabatic connection to analyze and build exchange-correlation free energy approximations
18	Martin Stoehr	Adaptive Machine Learning-Assisted Semiempirical Quantum Chemistry
19	Dean Lahana	Competing Photochemical Decay Pathways in 2-bromothiophene
20	Allen LaCour	Predicting the Raman Spectra of Liquid Water from the Electric Field Distribution
21	Bhaskar Rana	Simulating the Excited-State Dynamics of Polaritons with Ab Initio Multiple Spawning
22	Nicolas Sawaya	Quantum algorithms for vibrational structure
23	Andrew Snider	Machine Learning Optical Spectra for Complex Chromophore Environments
24	Selim Sami	Advanced force fields guided by energy decomposition analysis
25	Lukas Kim	Learning a suitable bond index for reactive force fields
26	Wenjun Xie	Establishing the Evolution-catalysis Relationship for Enzymes to Reprogram Biocatalysis
27	Imam Wahyutama	Attosecond molecular charge migration simulations using the density matrix renormalization group
28	Zhecheng He	A binding model of C-peptide with BSA and Cu ²⁺
29	Anthony D. Dutoi	Excitonic Renormalization for Large-scale Electronic-structure Calculations: Hermitian Variant
30	Will DeSnoo	Elucidating Palladium Catalyzed Allyl-Allyl Reductive Coupling Mechanism with H ₂ as Reductant
31	Panyue Wang	Water Prediction in the Tunnels of Respiratory Complex I
32	Jesi Lee	Modeling collision-induced-dissociation tandem mass spectrometry (CID-MS/MS) using ab initio molecular dynamics
33	Andrew Bovill	Characterizing Electronic Excited States Using Difference Density Natural Orbitals
34	Bowen Han	Incorporating Polarization and Charge Transfer into a Point-Charge Model for Water Using Machine Learning
35	Yingze Wang	iMiner workflow: A systematic physics-based machine learning workflow to propose drug molecules and evaluate the potency.

36	Frank Hu	Treating Semiempirical Hamiltonians as Flexible Machine Learning Models yields Accurate and Interpretable Results
37	Amiel Stephen Paz	Recovering dynamic correlation for SA-CASSCF with diabatic shifts: the diabate-shift-diagonalize method
38	Soren Holm	Mechanochemical Reactivity of 2H-naphthopyran and Fluorinated Ladderane
39	Cody Aldaz	The Reaction Template Studio
40	Maria Tsanai	Investigating the interactions that drive the formation of biomolecular condensates
41	Joseph Heindel	Plausibility of Hydrogen Peroxide Production in Neutral and Charged Microdroplets
42	Volga Kojasoy	The Computational Investigation of the Role of Sulfur Noncovalent Interactions in the Thiopeptide Antibiotic Glycothiohexide $\hat{1}\pm$
43	Nathan Yoshino	Nanoreactor Studies of the Oligomerization of Diphosphorus to Red Phosphorus
44	Jonathan Fajen	Ab initio multiple spawning with coupled cluster singles and doubles for nonadiabatic dynamics of small organic molecules
45	Srijan Bhattacharyya	Disentangling timescale competition and topology to remove finite-size dependence in transport calculations
46	Mingning Zhu	Systematically Constructing the QM region for Excited States QM/MM Calculations
47	Laura Weiler	Efficient many-body expansion with GPU-acceleration and large fragments
48	Christopher Myers	The Interplay Between Solute-Solvent Interactions for Spectral Lineshapes of the Cresyl Violet Chromophore
49	Rui Xu	Reaction Discovery from First Principles: Bridging Ab Initio Molecular Dynamics and Kinetic Modeling for Methane Pyrolysis Experiment
50	Eric Chung-Yueh Yuan	Deep learning of nuclear Hessians: Beyond interatomic energies and forces
51	Vsevolod Dergachev	Calculation of non-adiabatic coupling with the crystal field Hamiltonian to predict spin relaxation in single-ion magnets
52	Gilberto E. Fernandez	Mechanism and Origins of Site-selectivity of Template-Directed C-H Insertion of Quinolines
53	Colton Hicks	Commoditizing Distributed Quantum Chemistry at Scale: BigChem and ChemCloud
54	Tim Kowalczyk	Electroactive 2D covalent organic framework design: insights from semiempirical simulation
55	Shannon Houck	Recent Advances In Q-Chem 6.1
56	Maksym Fizer	Analysis of diradical character in polysubstituted pentacenes
57	Kevin Carter-Fenk	Giving Time-Dependent Density Functional Theory X-ray Vision: Electron Affinity Approaches for Core-Excited States
58	Kam-Tung (Tonybill) Chan	A First-Principles Study of the Effect of Cations and Solvation Environment on the Solvation Shell and UV-Visible Absorption Spectra of a Nitrate Ion
59	Diptarka Hait	Nonradiative relaxation mechanisms for electronic excited states of radical ions
60	Elisa Pieri	In silico assessment of molecular photostability in cyclopentenones
61	Jan Estrada Pabon	Automated splitting of reactions paths for minimum energy path optimization
62	Abdulrahman Y. Zamani	Estimating vertical core excitation energies from Moller-Plesset theory with spin projection
63	George Baffour Pipim	Characterization of Oligo-p-phenylene Catalyst Used in CO ₂ Photoreduction: Conventional vs Range-Separated Hybrids
64	Ethan Curtis	Automated, Iterative Force Field Fitting
65	Jason Tae Yi	Narrow entrance to the quinone reaction chamber hinders water transfer in respiratory complex I
66	Jie Li	Highly Accurate Prediction of NMR Chemical Shifts from Cheap Quantum Mechanics Calculations Using Machine Learning
67	Garrett Kukier	Dissociation in Implicit Solvent
68	Wentao Guo	Unveiling the Mechanism of C-H Insertion combined Cope Rearrangement: Insights from Density Functional Theory and Ab Initio Molecular Dynamics Simulation
69	Cristian Sarabia	Computational Photophysical Characterization of Phenyl Pyrazine Ketones
70	Pablo Andres Unzueta	Resolving the Excited State Dynamics of Acetophenone