Tuesday 5/29

2:00 PM	Thomas Papenbrock	Welcome
2:10 PM	Joe Carlson	NUCLEI introduction
2:20 PM	Dick Furnstahl	NUCLEI webpage
2:30 PM	Gaute Hagen	INCITE update
2:40 PM	Ted Barnes	DOE NP and SciDAC: Comments and Questions

Coffee Break 3:10 PM – 3:40 PM

IMSRG

3:40 PM	Heiko Hergert	TBD
4:00 PM	Anthony Tropiano	Decoupling of bound states with the Magnus expansion and the IM-SRG
4:20 PM	Jiangming Yao	Multi-reference in-medium similarity renormalization group for deformed nuclei

Bayesian Methods

4:40 PM	Jordan Melendez	Bayesian Gaussian Process Models for EFT Truncation Errors
5:00 PM	Dick Furnstahl	Exploring Bayesian parameter estimation for chiral effective field theory

Wednesday 5/30

Quantum Computing & Deep Learning

9:00 AM	Pavel Lougovski	Breaking the Quantum Cloud Barrier
9:30 AM	Titus Morris	Quantum Computing in Nuclei
9:50 AM	Alessandro Roggero	Quantum Computing for Nuclear Physics
10:10 AM	Weiguang Jiang	Neural network application in Nuclear Physics

Coffee Break 10:30 AM – 11:00AM

SciDAC-4 Project TEAMS

11:00 AM	Raph Hix	Toward Exascale Astrophysics of Mergers and Supernovae

Nuclear DFT

11:30 AM	Stefan Wild	Numerical optimization of next-generation functionals

Lunch Break 11:50 PM – 2:00 PM

Nuclear DFT cont'd

2:00 PM	Jon Engel	Beta decay in DFT
2:20 PM	Rodrigo Navarro Perez	Microscopically constrained EDFs: Full optimization and validation
2:40 PM	Samuel Giuliani	Fission fragments distributions using DFT and cluster emission in ^{294}Og
3:00 PM	George Fann	State of Multiresolution Nuclear HF and HFB Solvers

Coffee Break 3:20 PM – 3:50 PM

Nuclear DFT cont'd

3:50 PM	Erik Olsen	Analysis of alpha-decay chains in superheavy nuclei
4:10 PM	Yinu Zhang	Brueckner-Hartree-Fock calculations in the DME approach
4:30 PM	Tong Li and Mengzhi Chen	Hartree-Fock-Bogoliubov solver using Fast Fourier Transformation
4:45 PM	Witek Nazarewicz	(i) Fermion localizations in nuclear DFT and (ii) Bayesian approach to model-based extrapolations

Thursday 5/31

Quantum Monte Carlo

9:00 AM	Stefano Gandolfi	Recent Quantum Monte Carlo calculations of properties of nuclei
9:20 AM	Maria Piarulli	From light-nuclei to neutron matter within chiral dynamics
9:40 AM	Saori Pastore	Neutrinos and nuclei
10:00 AM	Bob Wiringa	The continuing search for a better Hamiltonian

Coffee Break 10:20 AM – 10:50 AM

Quantum Monte Carlo cont'd

10:50 AM	Rusty Lusk	Using shared memory with MPI-3
11:10 AM	Sri Hari Krishna Narayanan	Differentiation of Nucleon Matter Code
11:30 AM	Dean Lee	New developments in lattice effective field theory

Lunch 11:50 AM – 2:00 PM

Coupled Clusters

2:00 PM	Gaute Hagen	Coupled cluster computations of nuclei
2:20 PM	Gustav Jansen	Coupled-cluster on Summit
2:40 PM	Zhonghao Sun	Progress of shell model coupled cluster
3:00 PM	Sam Novario	Effective Nuclear Electroweak Operators with Coupled Cluster Theory

Coffee Break 3:20 PM – 3:50 PM

Coupled Clusters cont'd

3:50 PM	Aaina Bansal	Medium-mass atomic and lattice nuclei with pionless EFT

NCSM

4:05 PM	James Vary	No-Core Shell Model with Chiral EFT interactions and electroweak operators
4:25 PM	Chao Yang	Recent development in nuclear CI calculation

Friday 6/1

Shell Model

9:00 AM	Boyana Norris	Performance analysis tools and workflows
9:20 AM	Hasan Metin Aktulga	Updates on Recent Work with Sky3D and Gamow Shell Model Codes
9:40 AM	Kevin Fossez	Neutron-rich helium isotopes made simple, and progress on Gamow-SRG

Coffee Break 10:00 AM – 10:30 AM

EFTs for Nuclei

10:30 AM	Lucas Platter	From Halo EFT to Reaction EFT
10:50 AM	Marcel Schmidt	Halo Effective Field Theory for Nuclear Reactions

Closing

11:10 AM	Joe Carlson	Closing Remarks

Local Map: The meeting will be in Strong Hall (at the center of the map below, with the entrance close to where the blue phone is depicted) in Room B1. The hotel *Hilton Garden Inn University* is one block Southwest from Strong Hall.