

# REGISTRATION AND ABSTRACT SUBMISSION NOW OPEN

## CCP2018 XXX IUPAP Conference on Computational Physics,

July 29 – August 2, 2018  
University of California, Davis

The Conference on Computational Physics (CCP) is held annually under the auspices of the C20 Commission for Computational Physics of the International Union of Pure and Applied Physics (IUPAP)

<http://ccp2018.physics.ucdavis.edu/>

The 2018 Conference on Computational Physics (CCP2018) will be held at the University of California, Davis, from July 29 to August 2, 2018. This annual meeting, sponsored by the International Union of Pure and Applied Physics, alternates international venues. CCP2017 was in Paris, France, in July 2017.

The CCP2018 Conference brings together members of the international community of computational physics researchers to present their latest results, exchange information, and develop collaborations. CCP2018 welcomes contributions in broad-based areas under the umbrella of computational physics in both basic and applied subjects.

### TOPICS

- Statistical mechanics and complex systems
- Soft matter, polymer, and biological physics
- Materials physics (e.g. structure, dynamics, electronic structure, multi-scale methods)
- Fluid dynamics, turbulence, nanofluidics, and magnetohydrodynamics
- Quantum many-body physics (e.g. lattice models, ground and excited states, quantum criticality, novel methods)
- Quantum computation
- Lattice field theory in particle and nuclear physics
- Astrophysics, space-plasma physics, gravitation, cosmology
- Computational physics education
- Novel hardware and software paradigms (e.g. GPU computing, cloud computing, exascale and beyond, artificial intelligence)
- Energy, environment and climate modeling
- Machine learning and applications
- Algorithm development (e.g. monte carlo, molecular dynamics, neural networks, density functionals)

There will be plenary sessions each day of the conference followed by four parallel sessions of invited and contributed talks, as well as a poster session.

The CCP2018 website is: <http://ccp2018.physics.ucdavis.edu/>

Questions regarding CCP2018 can be sent to: [ccp2018@ucdavis.edu](mailto:ccp2018@ucdavis.edu).

On behalf of the organizing committee members, we look forward to welcoming you at CCP2018.

Sincerely,

Barry M. Klein, CCP2018 Chair  
Richard Scalettar, CCP2018 Vice Chair  
Warren E. Pickett, CCP2018 Vice Chair