



**EPSCoR Workshop**  
***“Emergent Quantum Materials and Technologies”***



**Thursday & Friday**  
**March 26-27, 2020**

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**DAY ONE (March 26, 2020)**

- 8:30 – 9:00 a.m. Registration/Coffee (Willa Cather Dining Complex, Red Cloud A)
- 9:00 – 9:05 a.m. Welcome & Introduction (Willa Cather Dining Complex, Red Cloud A)  
Nebraska EPSCoR Director – Dr. Matthew T. Andrews
- 9:05 – 9:20 a.m. Overview of EQUATE  
EQUATE PI – Dr. Christian Binek, NCMN/NNF Director, U. of Nebraska-Lincoln
- 9:20 – 9:50 a.m. Quantum Materials  
EQUATE FRG 1 Leader – Dr. Xia Hong, University of Nebraska-Lincoln
- 9:50 – 10:20 a.m. Quantum Technologies  
EQUATE FRG 2 Leader – Dr. Abdelghani Laraoui, University of Nebraska-Lincoln
- 10:20 – 10:50 a.m. Break (Willa Cather Dining Complex)
- 10:50 – 11:20 a.m. Quantum Information Processing  
EQUATE FRG 3 Leader – Dr. Jonathan Wrubel, Creighton University
- 11:20 – 11:50 a.m. Education/Outreach  
EQUATE E/O Leader – Dr. Rebecca Lai, University of Nebraska-Lincoln
- 11:50 – 1:00 p.m. Lunch (2<sup>nd</sup> Floor Dining Hall, Willa Cather Dining Complex)
- 1:00 – 1:45 p.m. New Materials and Devices for Quantum Coherent Technologies (Willa Cather Complex)  
Professor Michael Flatté, University of Iowa
- 1:45 – 2:30 p.m. Topological Quasiparticles: Magnetic Skyrmions  
Professor Axel Hoffmann, University of Illinois at Urbana-Champaign
- 2:30 – 3:15 p.m. Quantum Sensing with Photons and Atoms  
Professor Paul Lett, NIST
- 3:15 – 3:30 p.m. Break (Willa Cather Dining Complex)
- 3:30 – 4:15 p.m. Geometrodynamics of Bloch Electrons in Deformed Crystals  
Professor Qian Niu, University of Texas at Austin
- 4:15 – 5:00 p.m. New Directions for Quantum Walks  
Professor David Meyer, University of California-San Diego
- 5:00 – 5:45 p.m. Ultrafast Nanophotonics Applied to Quantum Optics and Plasmonics  
Professor Gary Wiederrecht, Argonne National Lab
- 5:45 – 6:45 p.m. Poster Session (Willa Cather Dining Complex, Red Cloud B and C)

**DAY TWO (March 27, 2020)**

- 8:30 – 9:00 a.m. Coffee (Lobby, 2<sup>nd</sup> Floor Voelte-Keegan Nanoscience Research Center)
- 9:00 – 10:30 a.m. Reviewer Meeting to Prepare Written Feedback (NANO Conference Room, Rm. N202)
- 10:30 – 12:00 p.m. Reviewer Meeting with FRG Leaders and EPSCoR Director (N202 NANO Conf. Rm.)
- 12:00 – 1:00 p.m. Lunch (Location TBD)
- 1:00 – 2:00 p.m. Tour of NNF/NCMN Facilities (Jorgensen Hall and Voelte-Keegan Nanoscience Center)