

FRIDAY, MAY 31, 2019 | NATURAL SCIENCES BUILDING, UC SAN DIEGO

Emergent Phenomena in Strongly Correlated Electron Systems:

A Symposium Recognizing Professor M. Brian Maple and his 50-year Career at UC San Diego

PROGRAM

8:50 - 9:00 am	Opening Remarks: Steven Boggs, Dean of Physical Sciences (UC San Diego) Introduction by Stefano Spagna (Quantum Design)
9:00 - 9:35 am	Keynote: Brian Maple (UC San Diego) Introduction by Stefano Spagna (Quantum Design)
9:35 - 10:20 am	Session I Chair: Milton Torikachvili (San Diego State University) 9:35 am - Lance De Long (University of Kentucky) "Emergent Long-Range Magnetic Order and Frustration in Thin-Film Quasicrystals" 9:50 am - Dimitri Basov (Columbia University) "Good Optics: Brian's Works on Electrodynamics of Correlated Electron Matter" 10:05 am - Sunil Sinha (UC San Diego) "Brian Maple and Fifty Years of Groundbreaking Materials Discoveries at UC San Diego"
10:20-10:50 am	Break I
10:50 - 11:10 am	Peter Riseborough (Temple University) "Topological Character of Non-magnetic Impurities in Smb ₈ " Introduction by Lawrence Woolf (General Atomics Aeronautical Systems, Inc.)
11:10am - 12:10 pm	Session II Chair: Lawrence Woolf (General Atomics Aeronautical Systems, Inc.) 11:10 am - Christophe Rossel (IBM Zurich Research Laboratory) "Wonderful Perovskites" 11:22 am - Milton Torikachvili (San Diego State University) "Magnetic Frustration in GdB ₄ and ErB ₄ -based Compounds" 11:34 am – John Neumeier (Montana State University) "H ₂ O Ice Should be Simple Compared to Heavy-Fermion Systems or High-T _c Superconductors, Don't You Think?" 11:46 am - Sergey Bud'ko (Ames National Laboratory) TBA 11:58 am - Prof. M. Brian Maple Video Presentation
12:00 - 12:20 pm	Group Photo – Natural Sciences Building Lobby

PROGRAM (CONT.)

12:20 - 2:00 pm	Lunch Break/Laboratory Visits Quantum Design Teaching and Materials Laboratory (Mayer Hall 3229) The Richard Averitt Laboratory (Mayer Hall 1114)
2:00 - 2:20 pm	Hilbert von Loehneysen (Karlsruhe Institute of Technology) “Entropy Landscape of Correlated Electron Metals at Quantum Criticality” Introduction by Don Eigler (IBM Research, ret.)
2:20 - 3:20 pm	Session III Chair: Don Eigler (IBM Research, ret.) 2:20 pm - Meigan Aronson (University of British Columbia) TBA 2:32 pm - Neil Dilley (Purdue University) “2D Magnets for Spintronics: Recent Work at Purdue” 2:44 pm - Stefano Spagna (Quantum Design) “A Versatile AC Susceptometer for the Study of Strongly Correlated Electron Materials at milli-Kelvin Temperatures” 2:56 pm - Eric Bauer (Los Alamos National Laboratory) “Recent Highlights of Uranium-based Quantum Materials at Los Alamos” 3:08 pm - Jost Diederichs (Quantum Design) “An Ultra-Sensitive Differential Dilatometer”
3:20 - 3:40 pm	Break II
3:40 - 4:40 pm	Session IV Chair: Peter Czipott (Consultant in Applied Physics) 3:40 pm - Pei-Chun Ho (Fresno State University) “Intriguing High-Temperature High-Magnetic-Field Phase Boundary due to Valence Transition in CeOs ₄ Sb ₁₂ ” 3:52 pm - JohnPierre Paglione (University of Maryland) “Nematic Enhancement of Superconductivity” 4:04 pm - Nicholas Butch (University of Maryland) “Uranium Compounds Still Offer Surprises: The Newest Spin Triplet Superconductor” 4:16 pm - Jason Jeffries (Lawrence Livermore National Laboratory) “Strategic Failure: A Reflection on Attempts to Renounce URu ₂ Si ₂ ” 4:28 pm - James Hamlin (University of Florida) “It’s Not Just P-T, It’s How You Get There”
6:00 - 9:00 pm	Reception followed by Dinner at Birch Aquarium Master of Ceremonies: Ivan Schuller (UC San Diego)

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The Richard Averitt Laboratory features the first Opticool magnet from Quantum Design. This state-of-the-art magnet produces fields to 7 Tesla and can go down to 1.5K with exceptional optical access for novel laser-based studies.