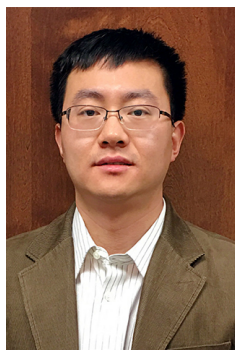


Wednesday, Mar 21, 2018

Oakland University PI Academy to welcome mentors from MIT, Pitt

Oakland University will welcome Professor **Geoffrey Beach** of the Massachusetts Institute of Technology (MIT) and Professor **Sandra Mitchell** of the University of Pittsburgh to the OU campus on March 29 and 30 as part of the new PI Academy mentoring program that pairs junior faculty with prestigious scholars from across the nation.

Dr. Beach, an associate professor of materials science and engineering at MIT and co-director of the Materials Research Laboratory, will be paired with **Wei Zhang, Ph.D.**, an assistant professor with the Department of Physics at OU.



Zhang

According to the MIT website, Beach worked in UCSD's Center for Magnetic Recording Research to develop novel magnetic thin-film nanocomposites for ultrafast data storage applications. He later went on to the University of Texas at Austin as a Postdoctoral Fellow in the Department of Physics and the Texas Materials Institute where he made important discoveries in magnetization dynamics and spin-transfer torque in nanoscale magnetic structures.

His current research interests focus on spin dynamics and “spin-electronics” in nanoscale magnetic materials and devices, which requires understanding the magnetization configurations in nanoscale structures and how they evolve in time. His work aims in part to understand and control spin excitations in magnetic materials whose dimensions approach fundamental magnetic length scales.

A major thrust of his research aims to harness the spin of the electron in magnetic materials to realize new approaches to spin-based storage and computation. Studying these processes requires the development of advanced instrumentation capable of probing magnetization dynamics at the shortest timescales and the smallest length scales. His team at MIT is working to develop new optical and electrical approaches to push the detection limits in order to enable development of new materials and structures to meet the information storage and processing demands of the future.

Also on March 29 and 30, the PI Academy mentoring program will pair Dr. Mitchell, a distinguished professor with the Department of History and Philosophy of Science at the University of Pittsburgh, with **Joyce Havstad, Ph.D.**, an assistant professor with Oakland University's Department of Philosophy.

According to the University of Pittsburgh website, Mitchell's research has centered on scientific explanations of complex behavior, and how we might best represent multi-level, multi-component complex systems. She has published articles on functional explanation, units of selection in evolutionary biology, sociobiology, biological complexity and self-organization, and scientific laws.

Her current interests include emergence, the methodological consequences of biological robustness and problems in representing deep uncertainty for policy decisions.

“Dr. Mitchell is a lovely person and a lively scholar,” Havstad said. “Throughout her career she has contributed to philosophical debate on the nature of laws in science, on what makes scientific explanation so special, on how complexity complicates theory-building in science, and much more. Dr. Mitchell has that rare intellect capable of influencing and changing minds on many topics and across disciplinary divides. I look forward to learning from her expertise and example.”



Joyce Havstad, Ph.D., an assistant professor with Oakland University's Department of Philosophy, will be paired with Dr. Sandra Mitchell of the University of Pittsburgh March 29 and 30 as part of the PI Academy mentoring program.



Beach

In addition to their roles as mentors, Dr. Beach and Dr. Mitchell will also be presenting special seminars during their visit.

Professor Beach will present a seminar at noon on March 29 in Room 372 of the Mathematics and Science Center (MSC) while Professor Mitchell w



Mitchell

The lectures are open to OU faculty, staff and students, as well as the general public.

More information about the events, as well as the PI Academy, is available on the Research Office website at oakland.edu/research/pi-academy.

About the PI Academy for Research and Engagement

The PI Academy provides professional development in research and engagement to a cohort of 30 non-tenured, tenure-track faculty members from across campus. The program includes training sessions, workshops, and other activities intended to enhance their abilities as principal investigators. Academy participants are also matched with an external mentor to further develop their skill set and career network. The PI Academy offers a great opportunity for interdisciplinary connections to be made between faculty of all disciplines. The program helps attract, support, and retain productive engaged faculty, and grows research at OU.