

2018 WINTER CONFERENCE

HIGH TEMPERATURE SUPERCONDUCTIVITY - UNIFYING THEMES IN DIVERSE MATERIALS

January 14 - 20, 2018 Sunday evening reception Meetings Monday through Friday Evening

Iron-based superconductivity has been at the center of condensed matter physics for nearly a decade. Recent developments in the study of the iron chalcogenides have renewed hope of reaching even higher transition temperatures for superconductivity. Meanwhile, considerable progress has been made on the understanding of their microscopic physics. Over the same period, the study of the venerable copper-based superconductors has undergone a drastic resurgence, due to a flurry of experimental discoveries and new theoretical understandings on the electronic orders in the pseudogap regime.

This Aspen Winter Conference will highlight the aforementioned developments, and showcase the unifying themes that are emerging from studying a diverse set of materials. While the focus will be on the iron- and copper-based systems, the conference will also feature the deepening understanding on quantum criticality in heavy fermion and organic superconductors, physics of spin liquids, as well as superconductivity above 200 K that has been reported under extreme pressure during the past two years.

Application deadline is October 31, 2017

Please complete your application at: http://www.aspenphys.org/physicists/winter/winterapps.html

Conference website: http://aspen2018.rice.edu

ORGANIZERS: *Robert J Birgeneau, UC Berkeley Zhi-Xun Shen, Stanford University Qimiao Si, Rice University *Denotes physicist in charge of diversity

Proposals for the 2019 Winter Conferences are invited and must be submitted by January 15, 2018

The Aspen Center for Physics is committed to a significant participation of women and under-represented groups in all of its programs.

Aspen Center for Physics 700 West Gillespie Street Aspen, CO 81611



phone: 970.925.2585 email: candace@aspenphys.org

The Aspen Center for Physics is supported by the National Science Foundation Grant No. PHY-1607611