



ASPEN CENTER FOR PHYSICS

2013 WINTER CONFERENCE

ON

ASTROPHYSICS

January 19 - 24, 2013

Reception Saturday evening

Meetings Sunday morning through Thursday noon

PHYSICAL APPLICATIONS OF MILLISECOND PULSARS

Millisecond pulsars are exotic, energetic neutron stars which allow us to probe multiple facets of fundamental physics via a variety of measurements at different wavelengths. Since the discovery of the first millisecond pulsar 30 years ago, over 200 of these objects have been discovered, with the population more than doubling in the last decade. These discoveries include many strange and unique systems that challenge our theoretical understanding and serve as powerful physics tools. This conference will be the third in a roughly decadal series of Aspen Winter Conferences on studying physics with pulsars. Among the topics to be discussed are: the acceleration of particles to highly relativistic energies in millisecond pulsar magnetospheres and the production of GeV gamma-rays by those particles, the unknown plasma physics responsible for radio eclipses from certain binary pulsars, the physics of matter at supra-nuclear densities and the equation of state of neutron-rich material, the evolution of binary and isolated millisecond pulsars, pulsars in globular clusters, classical and relativistic orbital dynamics including stringent tests of general relativity, and the likely imminent detection of nanohertz gravitational radiation using a pulsar timing array.

Application deadline is November 15, 2012

Please complete your application at www.aspenphys.org

Conference Website: aspen13.phys.wvu.edu

ORGANIZERS:

Maura McLaughlin, West Virginia University

Scott Ransom, National Radio Astronomy Observatory

Paul Ray, Naval Research Laboratory

Ingrid Stairs, University of British Columbia

Stephen Thorsett, Willamette University

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

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