Department of Physics
THE UNIVERSITY OF HONG KONG

Physics Colloquium

IXPE: The Mission, Initial Discoveries and Future Prospects

Date: November 16, 2022 (Wednesday)
Time: 10:00 a.m.
Zoom Online Lecture: https://bit.ly/3D7Bm99
Meeting ID: 933 3672 9143
Password: 2859

Prof. Roger W. ROMANI
Stanford University

Abstract:
IXPE, launched on December 9, 2021, is the first mission devoted to polarimetry of celestial targets in the classical soft X-ray band. Some 50 years after the first (and until recently, only) X-ray polarimetry detection (measuring the Crab nebula), IXPE has increased our polarization sensitivity by a factor of 100x and provided the first imaging polarimetry studies. With over 25 sources observed to date, from a dozen source classes, IXPE is establishing polarimetry as a powerful tool to explore the physics of compact objects and their outflows. After a review of IXPE's instrumentation and comment on the prospects for improved polarization analysis, we summarize some recent discoveries and outline the opportunities for additional work in the upcoming Guest Observer phase of the project.

Biography:
Romani obtained AB (Princeton) and PhD (Caltech) degrees before positions at UCB and IAS, Princeton. He has been on the faculty at Stanford for over 30 years, where he is a founding member of KIPAC and Director of the Center for Space Science and Astrophysics. He has been Gauss Professor Goettingen, Spitzer lecturer at Princeton and a visiting scientist at CSIRO and Arcetri. He is recipient of the Rossi Prize in High energy astrophysics and a Fellow of the American Astronomical Society.

Anyone interested is welcome to attend!

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