



Physics Colloquium Extrasolar planets with gravitational microlensing



April 2, 2025 (Wednesday)



5:00 p.m.

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MWT4, 1/F, Meng Wah Complex, Main Campus, HKU



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Abstract:

Microlensing has emerged as a potent technique for discovering cold extrasolar planets beyond the snowline, as well as free-floating planets. In this presentation, I will begin by explaining the fundamental principles of gravitational microlensing, then review some recent findings from ongoing surveys, and finally, explore the exciting discoveries anticipated with the upcoming Roman and ET satellites.

Biography:

Prof. Shude Mao earned his PhD from Princeton University in 1992. He then held postdoctoral positions at the Harvard-Smithsonian Center for Astrophysics (1992-1995) and the Max-Planck Institute for Astrophysics (1995-1999). From 2000 to 2010, he was a faculty member at the University of Manchester. Upon returning to China, he worked at the National Astronomical Observatories from 2010 to 2014 before joining Tsinghua University, where he served as the founding chair of the Department of Astronomy from 2019 to 2025. Recently, he moved to Westlake University as the chair of the Department of Astronomy.

His primary research interests include the search for extrasolar planets, galactic dynamics, and gravitational lensing.