

2020—2021 ASTROPHYSICS SEMINAR SERIES

Revealing Structure in the Milky Way with Galactic HII Regions

The present-day structure of the Milky Way is a constraint on theories of Galactic formation and evolution. HII regions, the zones of ionized gas surrounding recently formed high-mass stars, are common tracers of structure in both the Milky Way and other galaxies. Over the past 10 years, we have more than doubled the number of known Galactic HII regions by searching for radio recombination line emission toward infrared-identified HII region candidates. I will discuss (1) our latest project, the Southern HII Region Discovery Survey, (2) how we use our observations to derive the physical properties and distances of the nebulae, and (3) what we are learning about the morphological, kinematic, and chemical structure of the Milky Way with a complete census of Galactic HII regions.



Monday, October 19th

3:30 - 4:30 p.m.

See website for Zoom details

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