JOINT
ASTROPHYSICS/
SPACE PHYSICS
SEMINAR

WHEN & WHERE
Tuesday, February 18, 2020
12:30 p.m. | 309 VAN

SPEAKER
Professor Steve Spangler
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University of Iowa

TITLE
"Radio Propagation Studies of the Solar Wind in the Era of Parker Solar Probe"

ABSTRACT
Scientists interested in the solar wind have been thrilled by results from the Parker Solar Probe spacecraft, which recently made its fourth perihelion passage at a heliocentric distance of 0.12 astronomical units, or 27 solar radii. Parker Solar Probe is making measurements of the solar wind plasma, including turbulent fluctuations in plasma parameters. Starting in the 1960s, observations of radio sources in the vicinity of the Sun also showed evidence of turbulent plasma in the solar wind, and a substantial body of research was concerned with extracting properties of that plasma, both mean values as well as fluctuation characteristics. In these talks, I will discuss what we learned from those radioastronomical observations, how the conclusions compare with what we have learned from Parker Solar Probe so far, and how they might provide additional guidance for the Parker Solar Probe mission.