Contribution ID: **63** Type: **Talk**

Dark matter in the Milky Way

Wednesday 25 March 2020 10:30 (30 minutes)

The results of the Gaia astrometric mission have ushered in a new era of "precision Galactic dynamics." Using this new phase-space map of Galactic stars with unprecedented volume, we are beginning to obtain new insights into the dark matter distribution in our Galaxy. Thanks to significant advances on the computational front, meanwhile, we can now compare these insights directly with, and test our modeling strategies on, simulations of Milky-Way-mass galaxies where the influence of baryons and the cosmological context on the dark matter structure are realistically taken into account. I will review recent advances in our understanding of the Milky Way's dark matter distribution, made possible by this convergence of new data and better models, and outline prospects for the near future.

Author: Prof. SANDERSON, Robyn (University of Pennsylvania)

Presenter: Prof. SANDERSON, Robyn (University of Pennsylvania)

Session Classification: Session 2

Track Classification: Dark matter and structure in the Universe