University of Arizona—ranked #2 by NSF in Physical Sciences



Theoretical Astrophysics Program -- #1 in the US

- Department of Physics, Department of Astronomy, Department of Lunar and Planetary Sciences and Optical Science
- Recently large number of faculty hires in Astronomy and Astrophysics (Theoretical Astrophysics positions in Physics)
- Expected more hires in Astrophysics area including senior positions

Particle Astrophysics Group



Prof. Ina Sarcevic



Dr. Yu Seon Jeong
Postdoctoral Fellow



Pedro Luis Espino Graduate Student

DUNE members who were postdocs in HE theory group at Arizona (supported by Prof. Sarcevic): Raj Gandhi, Irina Mocioiu, Atri Bhattacharya and collaborator Prof. Hallsie Reno (U of Iowa)

Beyond the Standard Model (BSM) Physics with DUNE

Consider SN neutrinos and BSM interactions:

- 1) Unique features of SN neutrino spectrum in GPS model, Neutrino Portal Model. Interactions of SN with relic cosmic neutrinos and dark matter
- 3) Participate in SN working group and Cosmic Neutrino working group