Cosmic Structure
Science Interest Group (CoSSIG)

CoSSIG co-chairs:
Kevin Huffenberger (Florida State University)
Vera Gluscevic (University of Southern California)
Graca Rocha (Jet Propulsion Lab)
Cosmic Structure SIG Overview

Goal
Serve communities interested in utilizing measures of cosmic structure based on 3-dimensional spectroscopic and photometric surveys of galaxies, galaxy clusters, supernovae, and gravitational lensing.

Science Drivers
- Dark energy
- Dark matter
- Neutrinos
- Tests of inflation
- Astrophysical galaxy evolution
Cosmic Structure SIG Overview

CoSSIG is a group open to all members of the community, and provides a formal channel to communicate with the administration of the Astrophysics Division of the Science Mission Directorate @ NASA HQ

CoSSIG Co-chairs are appointed to 3-year terms, and sit on the Physics of the Cosmos Program analysis group Executive Committee (along with CRSIG, GWSIG, GRSIG, IPSIG, XRSIG)

Ryan Hickox (Dartmouth College), current PhysPAG EC Chair, reports semiannually to Astrophysics Advisory Committee,

For more on CoSSIG, mailing list, and the co-chairs’ contact information see:
https://pcos.gsfc.nasa.gov/sigs/cossig.php or search “nasa cossig”
Background themes for today

● What is the most exciting cosmic structure science?
● How is that achieved by operating missions, missions under development, and far-future missions?
● How does the anticipated release of Astro2020 affect that landscape?
● If a “probe”-class mission ($1 billion) were in the cards, what would bests complement the already planned portfolio?
● What is the broader context including ground as well and space.
Context: Missions...

- eROSITA
- JWST
- Euclid
- SPHEREx
- Roman Space Telescope
Session Q21, APS Meeting, April 2021

- Update on SPHEREx (30 min)
  Elisabeth Krause (University of Arizona)

- Update on Roman Space Telescope (30 min)
  Kris Pardo (NASA Jet Prop Lab)

- Panel Discussion (30 min)
  ○ Update from Euclid

- After Session Networking (Red button on the left panel of session page)