### **TACOS 2025 @ SHSU**

### **Report of Contributions**

Contribution ID: 1 Type: not specified

### Dark matter physics from our local galactic neighborhood

Monday 13 October 2025 15:50 (30 minutes)

<strong>Speaker:</strong> Francis-Yan Cyr-Racine (<small>University of New Mexico</small>)

Contribution ID: 2 Type: not specified

### Searching for ultraheavy dark matter using mechanical sensors

Monday 13 October 2025 16:20 (20 minutes)

**Speaker:** Juehang Qin (<small>Rice University</small>)

Contribution ID: 3 Type: not specified

### Probing the meV QCD Axion with the SQWARE Quantum Semiconductor Haloscope

Monday 13 October 2025 16:40 (20 minutes)

**Speaker:** Jaanita Mehrani (<small>Rice University</small>)

Contribution ID: 4 Type: **not specified** 

#### **Talkitos**

Monday 13 October 2025 10:20 (10 minutes)

Contribution ID: 5 Type: **not specified** 

### Learning clustering in Plato's cave

Monday 13 October 2025 11:20 (30 minutes)

**Speaker:** Alvise Raccanelli (<small>Università degli Studi di Padova</small>)

TBD

Contribution ID: 6 Type: not specified

#### **TBD**

Monday 13 October 2025 11:50 (20 minutes)

**Speaker:** Brandon Curd (<small>The University of Texas at San Antonio</small>)

Contribution ID: 7 Type: **not specified** 

#### **Talkitos**

Monday 13 October 2025 11:10 (10 minutes)

Contribution ID: 8 Type: **not specified** 

### Physics & Chemistry of the Baryon Cycle: Linking Massive Galaxies and Their Gas

Monday 13 October 2025 14:10 (30 minutes)

**Speaker:** Fakhri Zahedy (<small>University of North Texas</small>)

Contribution ID: 9 Type: **not specified** 

## COMAP × LOFAR: Forecasting the Cross-Correlation between CO(2–1) and 21-cm Lines during Reionization

Monday 13 October 2025 14:40 (20 minutes)

**Speaker:** Jianrong Tan (<small>Southern Methodist University</small>)

Contribution ID: 10 Type: not specified

#### **Talkitos**

Monday 13 October 2025 12:10 (10 minutes)

Contribution ID: 11 Type: not specified

### Dark matter and cosmology from JWST

Monday 13 October 2025 09:10 (30 minutes)

**Speaker:** Julian B. Muñoz (<small>The University of Texas at Austin</small>)

Contribution ID: 12 Type: not specified

### Halo bias in simulations at high redshifts

Monday 13 October 2025 09:40 (20 minutes)

**Speaker:** Kuan Wang (<small>The University of Texas at Austin</small>)

Contribution ID: 13 Type: not specified

### Galaxy-Halo connection modelling -Producing high-fidelity lightcones for DESI

Monday 13 October 2025 10:00 (20 minutes)

Speaker: Vaisakh Rajeev (<small>Southern Methodist University</small>)

Contribution ID: 14 Type: not specified

#### **Talkitos**

Monday 13 October 2025 15:00 (10 minutes)

Contribution ID: 15 Type: not specified

### Constraints on Hubble Tension Alleviation Through Black Hole Superradiance

Monday 13 October 2025 17:40 (20 minutes)

**Speaker:** Iain Bisset (<small>Texas A&M University</small>)

Contribution ID: 16 Type: not specified

#### Results from the Cosmic Dawn (CoDa) III Simulation: Inhomogeneous Reionization and Chemical Enrichment with Observational Signatures

Monday 13 October 2025 18:00 (20 minutes)

**Speaker:** Joohyun Lee (<small>The University of Texas at Austin</small>)

Contribution ID: 17 Type: not specified

#### **Talkitos**

Monday 13 October 2025 17:00 (10 minutes)

Contribution ID: 18 Type: not specified

#### No Nus is Good News

Tuesday 14 October 2025 09:10 (30 minutes)

**Presenter:** MEYERS, Joel (Southern Methodist University)

Contribution ID: 19 Type: not specified

# Intrinsic Alignments of Galaxies: A Systematic Effect for Weak Lensing Analysis but A Treasure Trove for Structure Formation

Tuesday 14 October 2025 09:40 (20 minutes)

Intrinsic Alignments of Galaxies · · ·

**Speaker:** Avijit Bera (<small>The University of Texas at Dallas</small>)

Contribution ID: 20 Type: not specified

### On the Orbital History of the Milky Way and M31

Tuesday 14 October 2025 10:00 (20 minutes)

**Speaker:** Odelia Hartl (<small>Texas A&M University</small>)

Contribution ID: 21 Type: not specified

### An Alcock-Paczynski test to measure cosmology from reionization bubbles

Tuesday 14 October 2025 11:00 (20 minutes)

**Speaker:** Emilie Thelie (<small>The University of Texas at Austin</small>)

Contribution ID: 22 Type: not specified

## Shedding Light on the KM3NeT Event: A Dark Matter Effect

Tuesday 14 October 2025 11:20 (20 minutes)

**Speaker:** Aparajitha Karthikeyan (<small>Texas A&M University</small>)

Contribution ID: 23 Type: not specified

### The Sun through a neutrino lens

Tuesday 14 October 2025 11:40 (30 minutes)

**Speaker:** Kevin Kelly (<small>Texas A&M University</small>)

Contribution ID: 24 Type: not specified

#### **Talkitos**

Monday 13 October 2025 14:00 (10 minutes)