Talk #138, 9/20/23

138th meeting of the Lyncean Group of San Diego

Date: Wednesday, 20 September 2023

Location: Southwestern Yacht Club 2702 Qualtrough Street, San Diego, CA 92106 (Point Loma)

Speaker: Dr. Karin Sandstrom Associate Professor, Department of Astronomy & Astrophysics (A&A), University of California San Diego (UCSD)

In March 2023, Dr. Sandstrom was one of the 12 founding faculty members of the new Astronomy & Astrophysics (A&A) Department at UCSD. A&A is transitioning from both the Physics Department and the Center for Astrophysics & Space Sciences (CASS) during the 2023/2024 academic year.

Speaker bio is available here: <u>https://karinsandstrom.github.io/aboutme.html#:~:text=I%20received</u> %20my%20Ph.,Max%20Planck%20Institute%20for%20Astronomy.

Topic: Exploring Our Dusty Universe with the James Webb Space Telescope (JWST)

Abstract: Most of the heavy elements that make up the Earth and everything on it (including all life on Earth) once resided in tiny grains of dust in interstellar space. Dr, Sandstrom described the fascinating lives of interstellar dust grains from their formation in fiery supernova explosions to their incorporation into planets like Earth. Although dust is an important player in many processes happening in our Galaxy, it is still very mysterious. Dr. Sandstrom explained how astronomers and astrophysicists are working to understand the properties of interstellar dust both in our Galaxy and others using incredibly detailed new observations from the recently launched James Webb Space Telescope.



39 Lyncean members and guests attended the September luncheon meeting.

Upcoming Tal

SUBJECT TO CHANGE

This information is also on the website unde

Date	Speaker	
9/20/23	Prof. Karin Sandstrom Associate Professor Center for Astrophysics & Space Sciences UCSD	Exp Jam
11/15/23	Prof. Colleen Petrik Assistant Professor Scripps Institution of Oceanography UCSD	Bio quo phy
January 2024	Dr. Andrea Smidler Postdoctoral Scholar UCSD School of Biological Sciences	Us po mo

Bill Hagan kicked off the meeting after lunch.



Early James Webb Space Telescope image: Dusty star-forming region called NGC 3324 in the Carina Nebula. Source: NASA, ESA, CSA, and STScI



Dr. Sandstrom presents "Exploring Our Dusty Universe JWST"



A multi-spectral image showing the complexity of a dusty region of space.





The Lyncean Coin presentation



Bill Hagan's meeting slides are available for download here: https://lynceans.org/wp-content/uploads/2023/09/Hagan-Meeting-Slides-9-20-23.pptx

Dr. Sandstrom's slide presentation is available for download here: <u>https://lynceans.org/wp-</u> content/uploads/2023/09/jwst_our_dusty_universe-compressed.pdf

For more information on the UCSD Department of Astronomy & Astrophysics, check out their website here: https://astro.ucsd.edu/about/history/index.html