

Dusting the Universe Conference Schedule

Sunday, March 3, 2019 - La Cocina & Dusty Monk

201 N Court Ave, Tucson, AZ 85701

5:00 - 7:00 pm Conference Welcome Reception

Monday, March 4, 2019 - ENR2 Room S107

8:00 - 9:00 Registration and Poster Setup

9:00 - 9:15 Introduction by Buell Januzzi and Announcements

9:15 - 10:30 **Session 1 - Physics and Origins of Dust (Chair: Aigen Li)**

9:15 Bruce Draine - Invited Speaker

9:45 Eli Dwek - *The Cosmic Evolution of Dust*

10:00 Alec Hirschauer - *Asymptotic Giant Branch Stars in the Low-Metallicity Galaxy NGC 6822*

10:15 Jeonghee Rho - *Dust and Molecule Formation and Evolution in Supernova Ejecta*

10:30 - 11:00 **Coffee Break**

11:00 - 12:30 **Session 2 - Behavior of Dust (Chair: Karin Sandstrom)**

11:00 Ed Jenkins - Invited Speaker

11:30 Brandon Hensley - *A Unified Model of the Emission, Extinction, and Polarization of Interstellar Dust*

11:45 Julia Roman-Duval - *Characterizing the Dust Abundance and Properties from the UV to the FIR*

12:00 Karl Gordon - *Near- and Mid-Infrared Interstellar Dust Extinction Observations*

12:15 - 1:30 **Lunch Break**

1:30 - 2:00 **Behavior of Dust (continued)**

1:30 Xuejuan Yang - *JWST and PAHs: Placing Unprecedented Constraints on the Chemical Structures of the Carriers of the Unidentified Infrared Emission Bands*

1:45 I-Da Chiang - *The Variation of the Dust-to-Metals Ratio in Resolved Nearby Galaxies*

2:00 - 3:00 **Session 3 - Lifecycle of Dust (Chair: Karl Gordon)**

2:00 Svitlana Zhukovska - Invited Speaker

2:30 Margaret Meixner - *The Life Cycle of Dust in the Magellanic Clouds: Insights from Spitzer and Herschel*

2:45 Varsha Kulkarni - *Observations of Element Depletions and Extinction Curves due to Dust in Distant Galaxies*

3:00 - 3:30 **Coffee Break**

3:30 - 3:45 **Lifecycle of Dust (continued)**

3:30 Chia-Yu Hu - *Dust Destruction by Supernovae in Time-Dependent 3D Hydrodynamical Simulations*

3:45 - 4:30 **Session 4 - Dust in the Lab (Chair: Karl Gordon)**

3:45 Cornelia Jäger - Invited Speaker

4:15 Hongbin Ding - *Characterization of Interstellar Dust Analogues in Laboratory Using the Broadband Terahertz Time-Domain Spectroscopy at Low Temperature*

4:30 - 5:15 Discussion (Leaders: Bill Reach and Karin Sandstrom)

5:15 End of Day 1

Tuesday, March 5, 2019 - ENR2 Room S107

9:00 - 10:30 Session 1 - Dust to Intermediate Redshifts (Chair: Arjun Dey)

9:00 Alexandra Pope - Invited Speaker

9:30 Eric Murphy - *Spinning Dust — New Detections of Anomalous Microwave Emission in Nearby Galaxies*

9:45 Wiphu Rujopakarn - *Smooth, Extended Cold Dust Distributions in $z \sim 3$ Galaxies*

10:00 Matus Rybak - *Resolving Dust and Gas Properties on $<1\text{kpc}$ Scales in $z\sim 3$ Dusty Galaxies*

10:15 Greg Walth - *Using Galaxy Clusters as Cosmic Telescopes to Explore the Properties of Distant Dusty, Star-Forming Galaxies*

10:30 - 11:00 Coffee Break

11:00 - 12:15 Session 2 - Dust: AGN and Their Hosts (Chair: Anna Sajina)

11:00 - 11:30 Allison Kirkpatrick - Invited Speaker

11:30 - 11:45 Aigen Li - *Are All Active Galactic Nuclei Born Equal? The Silicate Dust Mineralogy Perspective*

11:45-12:00 Jianwei Lyu - *Demystifying the Diverse IR SEDs of Type-1 AGNs from $z\sim 0$ to $z\sim 6$*

12:00-12:15 Monique Aller - *An Observational Investigation of Interstellar Silicate Dust Grains in Low- and Moderate-Redshift Galaxies Using Quasar Absorption Systems*

12:15 - 12:30 Poster Session

12:30 - 1:45 Lunch Break

1:45 - 2:15 Dust: AGN and Their Hosts (continued)

1:45 Qiong Li - *Dust Emission and Environment of The Most Distant Quasars at $z\sim 6$*

2:00 Erini Lambrides - *Mid-Infrared Spectroscopic Evidence for AGN Heating Warm Molecular Gas and Dust*

2:15 - 2:45 Session 3 - Dust in the Early Universe (Chair: Christina Williams)

2:15 Justin Spilker - Invited Speaker

2:45 - 3:15 Coffee Break

3:15 - 4:00 Dust in the Early Universe (continued)

3:15 Xiangcheng Ma - *Dust Obscuration and Dust Emission in $z\gg 5$ Star-Forming Galaxies*

3:30 Jingzhe Ma - *The Formation and Evolution of High-Redshift Dusty Galaxies*

3:45 Denis Burgarella - *What are the Physical Characteristics of Dust in LBGs at $z\gg 6$?*

4:00 - 4:45 Discussion (Leaders: Mark Dickinson and Stephanie Juneau)

4:45 End of Day 2

Wednesday, March 6, 2019 - ENR2 Room S107 and Desert Museum

9:00 - 10:15 Session 1 - Dust in Modeling (Chair: Denis Burgarella)

- 9:00 Cristina Popescu - Invited Speaker
- 9:30 Isabella Lamperti - *Dust Properties of Nearby Galaxies from the JINGLE Survey Inferred from Hierarchical Bayesian SED Fitting*
- 9:45 George Rieke - *The Far-Infrared Emission of the First Massive Galaxies*
- 10:00 Danny Dale - *A Two-parameter Dust Model for Galaxies and AGN*

10:15 - 10:30 Poster Session

10:30 - 11:00 Coffee Break

11:00 - 12:15 Session 2 - Dust in Simulations (Chair: Wiphu Rujopakarn)

- 11:00 Desika Narayanan - Invited Speaker
- 11:30 Qi Li - *Dust Content in the Cosmological Simulation*
- 11:45 Gergö Popping - *Modeling the Dust Content of Galaxies Over Cosmic Time*
- 12:00 Martin Glatzle - *Transfer of Ionizing Radiation through Gas and Dust*

12:15 - 1:00 Discussion (Leaders: Ben Weiner, Arjun Dey)

1:00 - 2:00 Boxed Lunch

2:00 Buses Depart to Desert Museum for Conference Outing and Dinner

See separate schedule for details

Thursday, March 7, 2019 - ENR2 Room S107

9:00 - 10:45 Session 1 - Dust Attenuation/Extinction (Chair: Susan Kassin)

- 9:00 Naveen Reddy - Invited Speaker
- 9:30 Veronique Buat - *Which Dust Attenuation Law(s) for Star-Forming Galaxies?*
- 9:45 Geoff Clayton - *Investigating Interstellar Dust in Local Group Galaxies with New UV Extinction Curves*
- 10:00 Lea Hagen - *Spatially Resolved UV Attenuation Curves with SOLV (Swift Observations of the Local Volume)*
- 10:15 Biwei Jiang - *Infrared Extinction Law and Very Large Dust Grains*
- 10:30 Weichen Wang - *Galaxy Inclination, the Dust Attenuation Law, and Dust Geometry at $z \sim 1.5$*

10:45 - 11:15 Coffee Break

11:15 - 12:15 Session 2 - Dust and the ISM (Chair: Dyas Utomo)

- 11:15 JD Smith - Invited Speaker
- 11:45 Jérémy Chastenot - *The PAH Fraction in the Small and Large Magellanic Clouds at 10 pc Scale*
- 12:00 Monica Relano - *Metals and Dust Content Across the Disks of Nearby Galaxies*

12:15 - 12:30 Group Photo

12:30 - 1:45 Lunch Break

1:45 - 2:30 Dust and the ISM (continued)

- 1:45 Matthew Smith - *Dust, Gas and Star Formation in Andromeda*
2:00 Jan Forbrich - *Beyond the Milky Way: Resolved Dust Observations and CO X Factor Measurements of Individual Giant Molecular Clouds in the Andromeda Galaxy M31*
2:15 Daizhong Liu - *A3COSMOS: Systematic Biases and New Measurements of the Gas Evolution in Galaxies out to $z \sim 6$*

2:30 - 3:15 Session 3 - The Obscured Universe (Chair: Greg Walth)

- 2:30 Caitlin Casey - Invited Speaker
3:00 Jorge Zavala - *Unveiling High-Redshift Dusty Star-Forming Galaxies Through 3mm Observations*

3:15 - 3:45 Coffee Break

3:45 - 4:15 The Obscured Universe (continued)

- 3:45 M d ric Boquien - *Dust and the Measurement of Star Formation in Galaxies*
4:00 Tanio Diaz-Santos - *The Multiple Merger Assembly of an Obscured Quasar at $z=4.6$*

4:15 - 5:00 Discussion (Leaders: Rob Kennicutt and Irene Shivaiei)

5:00 End of Day 4

Friday, March 8, 2019 - ENR2 Room S107

9:00 - 10:30 OST and Future Missions (Chair: Irene Shivaiei)

- 9:00 Stacey Alberts - *Dust with JWST/MIRI*
9:25 Eiichi Egami - *SPICA (Space Infrared Telescope for Cosmology and Astrophysics)*
9:50 Caitlin Casey - *ngVLA (Next Generation Very Large Array)*
10:05 Dennis Zaritsky - *The Giant Magellan Telescope and other ELTs*

10:20 - 10:40 Coffee Break

10:40 - 11:30 OST and Future Missions (continued)

- 10:40 Margaret Meixner - *Overview of the Origins Space Telescope*
11:05 Lee Armus - *Peering Through and Measuring Dust in Galaxies with The Origins Space Telescope*

11:30 - 12:30 Discussion Panel (Members: Eiichi Egami, Rob Kennicutt, Alex Pope, George Rieke, Marcia Rieke, Dennis Zaritsky, Caitlin Casey)

Synergies between future ground- and space-based facilities, including OST, JWST, SPICA, ngVLA, and ELTs

12:30 End of Conference

Poster Presentations

Ivana Barisic - *A Novel Approach to Measure the Dust Attenuation law at $z \sim 1$*

Arianna Brown - *Multiwavelength Case Studies on Herschel-Red Dusty Star Forming Galaxies at $z \sim 4-6$*

Caleb Choban - *Modeling Dust Evolution in FIRE*

Christopher Clark - *An Empirical Determination of the Dust Mass Absorption Coefficient and its Variation Within Nearby Galaxies*

Alexander de la Vega - *The Role of Dust Laws in SED Fitting of Galaxies at Intermediate Redshift*

Luis Ho - *Testing the Effectiveness of AGN Feedback with Dust Measurements*

Thomas Lai - *All the PAHs: a Spitzer-AKARI Cross-Archival Spectroscopic Survey of Aromatic Emission in Galaxies*

Qi Li - *Probing Cosmic Dust of the Early Universe through High-Redshift Gamma-Ray Bursts*

Ajay Mishra - *Unifying the Interstellar Extinction and Elemental Abundances*

Masashi Nashimoto - *Can Amorphous Dusts Explain AME?*

Anna Sajina - *Galaxies, AGN and their Environments -- The Role of Wide Area Surveys*

Zhenzhen Shao - *Gray Extinction for Active Galactic Nuclei?*

Alyssa Sokol - *Tracing the SFRD and BHARD together: How Linked are BH Accretion and Stellar Mass Buildup?*

Fengwu Sun - *Dissecting an Extremely-Lensed Dusty Star-Forming Galaxy at $z=4.7$*

Dyas Utomo - *The Distribution of Dust Mass and Temperature in Local Group Galaxies*

Dyas Utomo - *A $z=0$ Multi-wavelength Galaxy Synthesis I: A WISE and GALEX Atlas of Local Galaxies*

Yuxi Wang - *The Dust Extinction Laws in the M31*

Benjamin Weiner - *Fitting galaxy infrared SEDs with single dust models from a library is biased, but composite models can reduce the problem*

Yanxie Xie - *The Star Formation Efficiency of Quasar Host Galaxies at Low Redshifts*

Petia Yanchulova Merica-Jones - *Measuring Dust Properties at Low Metallicity using Color-Magnitude Diagrams of Stars in the Southwest Bar of the Small Magellanic Cloud*

Haibo Yuan - *Discovery of Dust Disks and Halo in the Galaxy*