



American Astronomical Society 237th Annual Meeting, January 2021

## Presentations of SOFIA Science Results and Capabilities

All times are Eastern

### Monday, January 11

12:30–12:40 pm

#### Oral Session 114.04

[O I] Self-Absorption and Absorption toward a Bubble-shaped PDR in the Nessie Nebula (*J. Jackson, J. Whitaker, E. Chambers, D. Allingham, H. Smith, I. Stephens, P. Sanhueza*)

12:40–12:50 pm

#### Oral Session 109.04

Dying of the Light: Cold Quasars & The Shutdown of Galaxy Growth (*K. C. Cooke, A. Kirkpatrick, M. Estrada, H. Messias, A. Peca, N. Cappelluti, T. Ananna, J. Brewster, E. Glikman, S. LaMassa, T. Leung, J. Trump, J. Turner, C. Urry*)

1:20–1:30 pm

#### Oral Session 114.09

Tracing Cloud-Cloud Collision: Orion A (*W. Lim, F. Nakamura, B. Wu, T. Bisbas, J. Tan, E. Chambers, J. Bally, S. Kong, P. McGehee, D. Lis, O. Volker, S. Alvaro*)

4:10–5:40 pm

#### iPoster Session 137: Assessing the Impact of Stellar Feedback

137.01. CO-dark Molecular Gas and Star Formation across the Nearby Spiral Galaxy NGC 6946 (*R. Klein, F. Bigiel, I. De Looze, A. Krabbe, D. Cormier, A. Barnes, C. Fischer, A. Bolatto, A. Bryant, S. Colditz, N. Geis, R. Herrera-Camus, C. Iserlohe, A. Leroy, H. Linz, L. Looney, S. Madden, A. Poglitsch, J. Stutzki, W. Vacca*)

137.02. Expansion of an H II Region Bubble in the Nessie Nebula Triggers Star Formation in the IRDC Filament (*J. Jackson, J. Whitaker, E. Chambers, D. Allingham*)

137.03. SOFIA FEEDBACK Survey: Exploring the Kinetics of the Stellar Wind Driven Shell of RCW 49 (*M. Tiwari*)

137.04. Stellar feedback and triggered star formation in the prototypical bubble RCW 120 (*M. Luisi, L. Anderson, N. Schneider, R. Simon, S. Kabanovic, R. Guesten, A. Zavagno, P. Broos, C. Buchbender, C. Guevara, K. Jacobs, M. Justen, B. Klein, D. Linville, M. Roellig, D. Russeil, J. Stutzki, M. Tiwari, L. Townsley, A. Tielens*)

4:10–5:40 pm

#### iPoster Session 153: Molecular Clouds, HII Regions, Interstellar Medium

153.01. Tracing a cloud-cloud collision towards the DR21 ridge with [CII] (*L. Bonne, N. Schneider, S. Bontemps, T. Csengeri, R. Simon, T. Bisbas, A. Tielens*)

153.02. The SOFIA Mid-Infrared Imaging Survey toward Giant HII Regions: W49A (*J. De Buizer, W. Lim, M. Gordon, N. Karnath, J. Radomski*)

153.15. How Massive Star FEEDBACK Carves Pillars out of Dense Gas (*R. L. Karim, M. W. Pound, M. Tiwari, M. G. Wolfire, L. G. Mundy, A. G. Tielens*)

153.16. SOFIA Elucidates the Structure of the Galactic Center H II Region/PDR Sgr B1 (*J. P. Simpson, A. S. Cotera, M. J. Kaufman, S. W. Colgan, S. R. Stolovy*)

### Tuesday, January 12

12:30–1:00 pm • Interactive Exhibit Hall

#### Zoom Webinar

Exploring the Mid-IR Galactic Center with SOFIA Legacy Maps (*J. Radomski, N. Karnath*)

12:40–1:00 pm

#### Oral Session 219.04

Bayesian Analysis for Characterization of Analogs to High-z Galaxies. (*S. M. Motino Flores, T. Wiklind, R. Eufrasio*)

2:30–3:00 pm • Interactive Exhibit Hall

#### Zoom Webinar

SOFIA: Science from the Stratosphere (*J. De Buizer*)

4:10–4:20 pm

#### Oral Session 229.01

Accretion in the Inner Regions of Disks Around Massive Young Stellar Objects (*A. Barr, A. Boogert, C. DeWitt, E. Montiel, M. Richter, J. Lacy, N. Indriolo, D. Neufeld, Y. Pendleton, J. Chiar, A. Tielens*)

4:10–5:40 pm

#### Special Session 223: Assessing the Impact of Stellar Feedback

223.01. Assessing the Dynamical Role of Stellar Feedback using Multiwavelength Observations (*L. Lopez*)

223.02. Galactic Winds and Supernovae (*C. Martin*)

223.03. The Lifecycle of Molecular Clouds in Nearby Galaxies (*M. Chevance*)

223.04. Outflow Feedback from Low-Mass Protostars (*H. G. Arce*)

223.05. The C+ Universe (*A. Tielens*)

223.06. UV Photodissociation and Thermal Processing in Interstellar Ices (*S. L. Widicus Weaver, K. Yocum, S. Milam, P. Gerakines*)

## Tuesday, January 12

5:00–5:10 pm

### Oral Session 228.05

Magnetic Field of the Galaxy M82 (*J. Guerra Aguilera, E. Lopez Rodriguez, J. Schmelz, M. Asgari Targhi*)

5:20–5:30 pm

### Oral Session 232.06

Mapping the Magnetic Field in Filamentary Cloud L1495/B211 with SOFIA HAWC+ (*P. Li, Enrique Lopez-Rodriguez, Hamza Ajeddig, Philippe André, Christopher F. McKee, Jeonghee Rho, Richard I. Klein*)

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## Wednesday, January 13

12:50–1:00 pm

### Oral Session 306.05

Dust Alignment and Magnetic Fields in the 30 Doradus Star-Forming Region (*S. Coude, T. Le Ngoc, E. Lopez Rodriguez, A. Soam, B. Andersson, W. Vacca, M. Gordon*)

1:00–1:30 pm • Interactive Exhibit Hall

### Zoom Webinar

SOFIA Archive Opportunities: Science-Ready Data and Funding (*E. Chambers, L. Rebull, B. Andersson*)

1:20–1:30 pm

### Oral Session 308.07

Magnetic Field in the Central Region of the Circinus Galaxy with SOFIA/HAWC+ (*L. Grosset, E. Lopez Rodriguez*)

2:40–3:10 pm • SOFIA Exhibit Booth

### Zoom Chat

Margaret Meixner, SOFIA Mission Operations Director

4:10–4:40 pm • SOFIA Exhibit Booth

### Zoom Chat

Nassem Rangwala, SOFIA Project Scientist

4:10–5:40 pm

### iPoster Session 343: Milky Way & Galactic Center

343.03. Towards Understanding the Galactic H II Region Sgr B1: Dust properties and Massive Stars (*A. Cotera, J. Simpson, M. Hankins*)

4:10–5:40 pm

### iPoster Session 348: Star Formation

348.05. Polycyclic Aromatic Hydrocarbons (PAH) and Paschen-Alpha Imaging Survey of NGC 2024 with FLITECAM (*J. Klusmeyer, S. Logsdon, E. Smith, I. McLean*)

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## Thursday, January 14

12:15–1:15 pm

### Press Conference Galaxies & Quasars II

Magnetic Highway: Channeling the M82 Super Wind (*J. G. Aguilera*)

Magnetic Chaos Hidden in the Whirlpool Galaxy (*A. Borlaff*)

12:30–12:40 pm

### Oral Session 406.04

The First Mid-Infrared Detections of HNC and H<sup>13</sup>CN in the Interstellar Medium (*S. Nickerson, N. Rangwala, S. Colgan, C. DeWitt, X. Huang, K. Acharyya, M. Drozdovskaya, R. Fortenberry, E. Herbst, T. Lee*)

12:40–12:50 pm

### Oral Session 408.04

Deconstructing IR emission in AGN Deconstructing IR Emission in AGN using SOFIA/HAWC (*L. Fuller*)

3:10–4:00 pm

### Plenary Session 421

Thermal-IR Astronomy: Progress & Future Prospects, (*C. Packham*)

4:10–4:20 pm

### Oral Session 430.01

The Multi-Phase Spiral Magnetic Field of M51 (*A. S. Borlaff, E. Lopez Rodriguez, L. Grosset, P. M. Marcum, J. E. Beckman, A. Hughes, R. Stepanov*)

4:30–4:40 pm

### Oral Session 430.03

The Magnetic Field across the Warped Molecular Disk of Centaurus A (*E. Lopez Rodriguez*)

4:30–4:40 pm

### Oral Session 441.03

Molecular Gas along the Bar of NGC 7479 (*D. Fadda, S. Laine, P. Appleton*)

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## Friday, January 15

11:00–11:50 am

### Plenary Session 500

The Role of Magnetic Fields: Galactic Science from HAWC+/SOFIA, (*D. Chuss*)

12:50–1:00 pm

### Oral Session 511.06

Building a High-Resolution Mid-Infrared Spectral Line Database for Hot Molecular Cores (*N. Rangwala*)

1:40–2:40 pm

### SOFIA Town Hall

- SOFIA Status (*M. Meixner*)
- Instrument Roadmap Summary (*J. M. Jackson*)
- Cycle 9 Summary (*B. Andersson*)
- USRA SOFIA Awards

4:40–4:50 pm

### iPoster-Plus Session 526: Dust

526.04. SOFIA/FLITECAM 3-5.4 micron Spectroscopy of PAHs in Planetary Nebulae (*E. C. Smith, S. Logsdon, I. S. McLean, E. Fletcher, W. Vacca, E. Becklin, S. Shenoy, M. Savage, R. Hamilton*)