

proprietary

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Science & Public Outreach

Winter AAS in Seattle

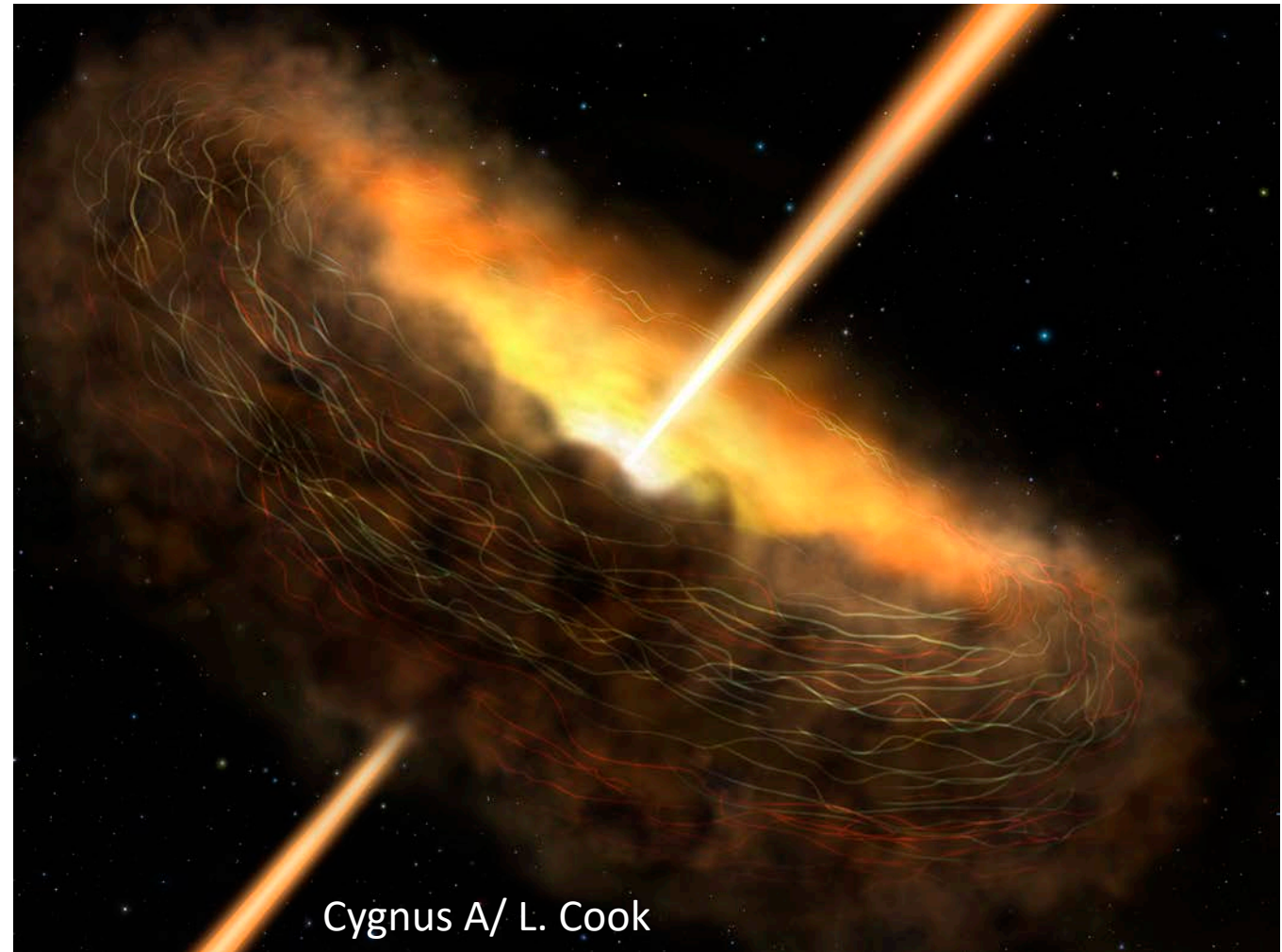
- Data analysis workshop
 - FORCAST and HAWC+
- Special Session:
 - The Role of Magnetic Fields and Filaments in Star Formation
- SOFIA Town Hall
- Booth
- Hyperwall Talk
- Print Newsletter
- SOFIA Tours
- Possible press conference



Design by Leslie Proudfit

On the Public Outreach side

- Reach out to Users with a new science result we want to promote
- Ask them to work with us to write a Web Release for NASA.gov
- Modify, edit, and polish the draft (target audience: general public)
- Create graphics (in house) or commission art (contracted out)
- Submit the piece to Ames, Armstrong, and HQ OCOMM offices for approval
- Upload to NASA.gov
- Post to SOFIA social media accounts
 - Facebook
 - Twitter
 - Instagram
- Coordinate posting on the @NASA flagship accounts
- AMES Bulletin Board



<https://www.nasa.gov/feature/magnetic-fields-may-be-the-key-to-black-hole-activity>

On the Science Outreach side

- Create a Science Spotlight (target audience: Astronomers)
- Upload to the SOFIA home page (slider)
- Post the story on the Astronomers Facebook page (permission from the moderator)
- Contacted editor of AAS Nova, Susanna Kohler; flying on Dec 11/12 and writing several stories
- Contact SOFIA-affiliated grad students to see if they are interested in writing an article for AstroBites on a SOFIA science topic
- Send these stories to our users (Outreach) and staff (In-reach) so they are all more aware of the science results from SOFIA
 - arc-dl-sofia-all-hands
 - e-Newsletter (3700 subscribers)



<https://www.sofia.usra.edu/multimedia/science-results-archive/cosmic-collisions-unraveling-mysterious-formation-star-clusters>

Graphics and Art:

- SOFIA gallery canvas prints for the walls of N232 here at Ames;
- NASA Picture of the day
- Submit the graphics or art to the Astronomy Picture of the Day
- Create posters and stickers to distribute to staff and attendees at the AAS meetings and public events
- Cover article for the SOFIA Newsletter
- Image feature for website
- Pull-up banner for exhibits
- Lenticular pins and postcards
- Downloadable screen saver from our website
- Downloadable poster from our website

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SOFIA Observations of M82

HAWC+ Instrument

- M82 is a starburst galaxy ~12 million light-years away in the constellation Ursa Major.
- Streamlines show the magnetic field morphology from SOFIA HAWC+ 53- μm polarization maps.
- The image combines
 - visible starlight (grey) and H-alpha emission (red) from the Kitt Peak 2.1-m (SINGS Legacy project), and
 - NIR and MIR starlight plus dust from Spitzer and SOFIA (3.6 and 53 μm , yellow).
- The magnetic field appears to follow the bipolar outflows generated by the intense nuclear starburst.

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NASA/SOFIA

E. Lopez-Rodriguez/ W. Reach/ L. Proudfit

SOFIA Observations of the Galactic Center

FORCAST and HAWC+ Instruments

- Color shows the SOFIA FORCAST image of the dusty arcs that surround and possibly feed the massive black hole at the center of our Milky Way galaxy.
- Streamlines show the magnetic field morphology from SOFIA HAWC+ polarization maps.
- This combination allows us to compare the direction of the magnetic field and the orientation of the dusty material.
- Star field: HST NICMOS.

NASA/SOFIA

D. Dowell/W. Reach/L. Proudfit

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SOFIA Observations of W51A

FORCAST Instrument

- W51A is one of the largest and brightest star-forming regions in the Milky Way.
- It lies 18,000 light years away in the constellation of Aquila.
- This image is composed of
 - SOFIA mid-infrared data (20 μ m—blue, and 37 μ m—green), and
 - Herschel far-infrared data (70 μ m—red).
- Colors trace the warm emission from dust that is being heated by the ongoing star formation activity.
- Star field: Sloan 0.9 μ m.

NASA/SOFIA

J. De Buizer/W. Lim

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Community Days

Location	Participants	Institutions	Local Organizers
IPAC (Pasadena)	17	IPAC, Caltech, JPL UC Irvine Coll. Canyons UCLA	R. Paladini
NRAO (Charlottesville)	16	NRAO UVa	L. Fissel
UT Austin	17	UT Austin Texas A&M UMass	J. Spilker
NOAO (Tucson)	20	UA, ASIAA Steward, NOAO UNLV	R. Nikutta