# YAO-LUN YANG

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## CONTACT INFORMATION

Department of Astronomy, University of Texas at Austin

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#### RESEARCH INTERESTS

Early Stage Star Formation, Outflows and Jets, Interstellar Medium, Atomic and Molecular Spectroscopy, and Infrared & Radio Astronomy

## **EDUCATION**

2019 Ph.D. Astronomy (expected)

The University of Texas at Austin, U.S.A.

Advisor: Prof. Neal J. Evans II

Dissertation: The Structure of Class 0 Protostars

2016 M.A. Astronomy

The University of Texas at Austin, U.S.A.

Advisor: Prof. Neal J. Evans II

Thesis: The Class 0 Protostar BHR71: Herschel Observations and Dust Continuum Models

2012 B.S. Physics

National Taiwan University, Taiwan Advisor: Dr. Ciska Kemper (ASIAA)

Project: Molecular Hydrogen in Diffuse Interstellar Medium of the Large Magellanic Cloud

## **AWARDS**

Professional Development Award (\$600), UT-Austin

University Graduate Continuing Fellowship (2017-2019, \$80 000), UT-Austin

Fred T. Goetting, Jr. Memorial Endowed Presidential Fellowship (\$10000), UT-Austin

Summer Internship (\$14120), STScI

Outstanding Thesis Award (\$1000), UT-Austin

Summer Student Fellowship (\$1300), ASIAA

College Student Research Training Fellowship (\$1500), National Science Council, Taiwan

## **PUBLICATION**

## First-Author and Significant Contribution Refereed Journal Articles

- [4] Yang, Y.-L., Green, J. D., Evans, N. J. II, et al. 2018, "CO in Protostars (COPS): Herschel-SPIRE Spectroscopy of Embedded Protostars", ApJ, accepted, arXiv:1805.00957
- [3] Yang, Y.-L., Evans, N. J. II, Green, J. D. et al. 2017, "The Class 0 Protostar BHR71: Herschel Observations and Dust Continuum Models", ApJ, 835, 259
- [2] Green, J. D., Yang, Y.-L., et al. 2016, "The CDF Archive: Herschel PACS and SPIRE Spectroscopic Data Pipeline and Products for Protostars and Young Stellar Objects", AJ, 151, 75
- [1] Larson, R. L., Evans, N. J., Green, J. D., Yang, Y.-L. 2015, "Evidence for Decay of Turbulence by MHD Shocks in the ISM via CO Emission", ApJ, 806, 70

## Other Refereed Journal Articles

- [5] Yi, H-.W., Lee, J-.L., Liu, T, et al. 2018, "Planck Cold Clumps in the  $\lambda$  Orionis complex. II. Environmental effects on core formation", submitted, arXiv:1805.05738
- [4] Karska, A, Kaufman, M. J., Kristensen, L. E., et al. 2018, "The Herschel-PACS Legacy of Low-mass Protostars: Far-IR Gas Properties and Their Origin in FUV-illuminated Cshocks", ApJS, 235, 30

- [3] Liu, T, Kim, K.-T., Juvela, M, et al. 2018, "The TOP-SCOPE Survey of Planck Galactic Cold Clumps: Survey Overview and Results of an Exemplar Source, PGCC G26.53+0.17", ApJS, 234, 28
- [2] Green, J. D., Jones, O. C., Keller, L. D., el al. 2016, "The Mid-infrared Evolution of the FU Orionis Disk", ApJ, 832, 4
- [1] Naslim, N., Kemper, F., Madden, S. C., et al. 2015, "Molecular Hydrogen Emission in the Interstellar Medium of the Large Magellanic Cloud", MNRAS, 446, 2490-2504

## **OBSERVING PROGRAMS**

**ALMA**, cycle 4, 1 hr (as PI)

SOFIA/GREAT, cycle 6, 4.1 hrs (as PI, \$41 000 awarded)

SOFIA/FORCAST, cycle 6, 3.9 hrs (as Co-I, \$7000 awarded)

SOFIA/GREAT, cycle 4, 5.3 hrs (as Co-PI, \$56000 awarded)

SOFIA/FORCAST, cycle 4, 3 hrs (as Co-I, \$33000 awarded)

Harlan J. Smith Telescope/DIAFI, 4 nights (as on-site observer)

IRTF/TEXES, 2016, 2 nights (as Co-I & on-site observer)

IRTF/TEXES, 2015, 1 night (as Co-I & on-site observer)

IRTF/TEXES, 2014, 1 night (as Co-I & on-site observer)

## CONTRIBUTED TALKS

Star and Planet Formation Seminar, STScI, Baltimore 231 <sup>st</sup> AAS Meeting, National Harbor, DC	2018 2018
2017 Asia-Pacific Regional IAU Meeting, Taipei, Taiwan	2017
72 <sup>nd</sup> International Symposium on Molecular Spectroscopy,	Champaign-Urbana, IL
2017	
230th AAS Meeting, Austin, TX	2017
SPF Seminar, MPIA	2016
SPF Seminar, ESO-Garching	2016
Astrochem Seminar, Leiden	2016
Star Formation 2016, Splinter session, Exeter	2016
AstroCoffee Talk, IfA	2015
Subaru Seminar, Subaru Telescope	2015
Lunch Talk, ASIAA	2015
Lunch Talk, NRAO/UVa	2015
Workshop on Dense Cores, Monterey, CA	2014
ISM/Planets seminar, UT-Austin, 5 Talks	2013 – 2017

## PUBLIC OUTREACH AND PROFESSIONAL SOCIETY MEMBERSHIP

- Organizer, Astronomy on Tap ATX, Austin, TX, 2016— Monthly astronomy talk held in a local bar joined by more than 250 audience
- Talk, "Will They Call Me on My Cell Phone: How the Drake Equation Estimates the Odds of Finding ET", Astronomy on Tap ATX, Oct. 2016
- Talk, "Astronomical Observations", Astronomy Student Association, The University of Texas at Austin, Mar. 2015
- Talk, "How to Make A Star", Monthly Star Party, Westcave Preserve, Jan. 2015
- Talk, "From Cold Gas to Hot Stars", Astronomy Student Association, The University of Texas at Austin, Mar. 2014
- American Astronomical Society Member, 2017–