

# YAO-LUN YANG

[yaolunyang.astro@gmail.com](mailto:yaolunyang.astro@gmail.com) | <https://yaolun.github.io>

## CONTACT INFORMATION

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Department of Astronomy, University of Texas at Austin  
2515 Speedway, Stop C1400, Austin, Texas USA 78712-1205

Phone: +1 512 5749925

## RESEARCH INTERESTS

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

## EDUCATION

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**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 AND RECOGNITIONS

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Concentration in Teaching and Mentoring, UT-Austin

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

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

Fred T. Goetting, Jr. Memorial Endowed Presidential Fellowship (\$10 000), UT-Austin

Summer Internship (\$14 120), STScI

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

Summer Student Fellowship (\$1300), ASIAA

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

## PUBLICATION

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### 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](#), **860**, 174
- [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”, [ApJS](#), **236**, 2

- [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 C-shocks”, [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., **et 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

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**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, \$7 000 awarded)  
**SOFIA/GREAT**, cycle 4, 5.3 hrs (as Co-PI, \$56 000 awarded)  
**SOFIA/FORCAST**, cycle 4, 3 hrs (as Co-I, \$33 000 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

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<b>6<sup>th</sup> GMT Science Meeting: Stars Birth &amp; Death</b> , Honolulu, HI	2018
<b>231<sup>st</sup> AAS Meeting</b> , National Harbor, DC	2018
<b>2017 Asia-Pacific Regional IAU Meeting</b> , Taipei, Taiwan	2017
<b>72<sup>nd</sup> International Symposium on Molecular Spectroscopy</b> , UIUC, IL	2017
<b>230<sup>th</sup> AAS Meeting</b> , Austin, TX	2017
<b>Star Formation 2016, Splinter session</b> , Exeter, UK	2016
<b>Workshop on Dense Cores</b> , Monterey, CA	2014
<b>12 Seminar Talks</b> at NRAO/UVa, ASIAA, Subaru Telescope, IfA/U of Hawaii, Leiden University, ESO-Garching, MPIA (Heidelberg), STScI, East Asia Observatory, CfA/Harvard, and U of Arizona	

## PUBLIC OUTREACH AND PROFESSIONAL SOCIETY MEMBERSHIP

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- 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, UT-Austin, Mar. 2015
- Talk, “*How to Make A Star*”, Westcave Preserve, Jan. 2015
- Talk, “*From Cold Gas to Hot Stars*”, Astronomy Student Association, UT-Austin, Mar. 2014
- American Astronomical Society Member, 2017–