

# Feng Long

## Curriculum Vitae

Kavli Institute for Astronomy and Astrophysics  
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### Education

- 2013 - 2019 **Ph.D. candidate, Astrophysics, Peking University**, Beijing, China.  
expected Advisor: Gregory J. Herczeg  
2009 - 2013 **B.S., Astronomy, Peking University**, Beijing, China.

### Research

Broad interests in star and planet formation, especially focusing on protoplanetary disks, including disk formation, the disk physical and chemical evolution, and their implications for planet formation.

- ◇ Disk substructures revealed from ALMA observations
- ◇ Gas and dust masses of protoplanetary disks
- ◇ HNC distribution in protoplanetary disks
- ◇ Disk-based stellar dynamical mass measurement

### Research Experiences and Training

- Jan. 2018 **Visiting student with Dr. Paola Pinilla**, Univ. of Arizona, USA.  
Sept. 2017 **Visiting student at Prof. Ewine van Dishoeck's group**, MPE, DE.  
March 2016 **Visiting student at Prof. Ilaria Pascucci's group**, Univ. of Arizona.  
July 2015 **NRAO Single-Dish and Interferometry Schools**, Green Bank, USA.

### Approved Proposals

- 2018 **ALMA Cycle 6 A-rank (2018.1.00614.S, Open Sky Project; PI.)**, *Are Large Grains Trapped in Disk Rings?*.
- 2018 **ALMA Cycle 6 A-rank (2018.1.01055.L, Large Program; co-I.)**, *The Chemistry of Planet Formation*, PI: Karin Öberg.
- 2018 **ALMA Cycle 6 B-rank (2018.1.00771.S; co-I.)**, *Born with siblings: will I ever get my own space?*, PI: Carlo F. Manara.
- 2017 **ALMA Cycle 5 A-rank (2017.1.01107.S; co-I.)**, *The chemistry of M dwarf protoplanetary disks*, PI: Karin Öberg.
- 2016 **ALMA Cycle 4 B-rank (2016.1.01164.S; co-I.)**, *An Unbiased Survey of Disk Structures in Taurus*, PI: Gregory J. Herczeg.
- 2015 **ALMA Cycle 3 B-rank (2015.1.00310.S; co-I.)**, *Searching for Accretion Luminosity Variability in Deeply Embedded Protostars*, PI: Doug Johnstone.
- 2015 **ALMA Cycle 3 B-rank (2015.1.00333.S; co-I.)**, *Establishing the Disk Mass-Stellar Mass Scaling Relation*, PI: Ilaria Pascucci.
- 2015 **JCMT Large Program (M16AL001; co-I.)**, *A Transient Search for Variable Protostars: How do stars gain their mass?*, PI: G. J. Herczeg & D. Johnstone.

## Selected Honors

- 2017 National Scholarship, Peking University
- 2016 Presidential Scholarship, Peking University
- 2016 Award for Community and Public Service, Peking University
- 2011 - 2013 National Astronomical Observatory of China Scholarship

## Expertise

- Astrophysical CASA, Galario, RADMC-3D
  - ALMA data reduction, disk modeling in uv-plane, radiative transfer
- Programming Python, IDL, shell, R, Julia and C
- Language Chinese(native speaker), English(fluent)

## Teaching Experience, Service & Outreach

- 2014 - 2018 Undergraduate Student Instructor, School of Physics, Peking University
  - Organizing 1-2 class meetings each semester for 25 students, and keeping track of individual student on both studies and personal life
  - Organizing the Undergraduate Research Symposium, 2016, KIAA
- 2015 Teaching Assistant, graduate course “stellar structure and evolution”, Peking University
- 2012 Volunteer for the XXVIIIth IAU General Assembly, Beijing
- 2012 Astronomy lectures about solar system to primary school students in a supporting education activity at Yunnan Province

## Selected Talks, Seminars & Posters

- July 2018 **Poster**, *HNC Distribution in Protoplanetary Disks as Probes of Disk Structures*, Astrochemistry 2018, Pasadena, CA, USA.
- April 2018 **Graduate Dinner Talk**, *ALMA Survey of Protoplanetary Disks: Dust and Gas Masses*, KIAA, Beijing, China.
- March 2018 **Poster**, *An Unbiased Survey of Disk Structures in Taurus*, Star and Planet Formation in the Southwest, Tucson, USA.
- Sept 2017 **Seminar**, *ALMA Survey of Protoplanetary Disks: Dust and Gas Masses*, ESO, Garching, Germany.
- Aug 2017 **Conference Talk**, *An ALMA Survey of CO isotopologues in Protoplanetary Disks in Chamaeleon I*, Chinese Astronomical Society annual meeting, Xinjiang, China.

## Publications [ADS Link]

### First Author Papers

- \* **Long, F.**, Herczeg, G. J. et al., *A High-Resolution ALMA Survey of Dust Substructures in Disks in the Taurus Molecular Cloud*, in prep
- \* **Long, F.**, van Dishoeck, F. E., Cazzolett, P., & Facchini, S., *HNC Distribution in Protoplanetary Disks as Probes of Disk Structures*, in prep
- 2018 **Long, F.**, Pinilla, P., Herczeg, G. J. et al., *Gaps and Rings in an ALMA Survey of Disks in the Taurus Star-forming Region*, ApJ accepted
- 2018 **Long, F.**, Herczeg, G. J., Pascucci, I. et al., *An ALMA Survey of faint disks in the Chamaeleon I star-forming region: Why are some Class II disks so faint?*, ApJ, 863, 61
- 2017 **Long, F.**, Herczeg, G. J., Pascucci, I. et al., *An ALMA Survey of CO isotopologue emission from Protoplanetary Disks in Chamaeleon I*, ApJ, 844, 99

### Contributing Papers

- 2018 Liu, Y, Dipierro, G, Ragusa, E, & 20 authors including **Long, F.**, *The Ring Structure in the MWC 480 Disk Revealed by ALMA*, submitted to A&A
- 2018 Herczeg, G. J., Johnstone, D., Mairs, S. & 54 authors including **Long, F.**, *How Do Stars Gain Their Mass? A JCMT/SCUBA-2 Transient Survey of Protostars in Nearby Star-forming Regions*, ApJ, 849, 43
- 2017 Holoién, T. W., Stanek, K. Z., Kochanek, C. S., & 31 authors including **Long, F.**, *The ASAS-SN bright supernova catalogue - I. 2013-2014*, MNRAS, 464, 2672
- 2016 Pascucci, I., Testi, L., Herczeg, G. J., **Long, F.** & 11 authors *A Steeper than Linear Disk Mass-Stellar Mass Scaling Relation*, ApJ, 831, 125
- 2016 Holoién, T. W., Kochanek, C. S., Prieto, J. L., & 21 authors including **Long, F.**, *Six months of multiwavelength follow-up of the tidal disruption candidate ASASSN-14li and implied TDE rates from ASAS-SN*, MNRAS, 455, 2918