Yaoting Yan

Max-Planck-Institut für Radioastronomie, Auf dem Hügel 69, 53121 Bonn, Germany

Homepage https://yaotingyan.github.io/

Telephone +86 13824465597; +49 015256043266

Email yyan@mpifr-bonn.mpg.de, s6yayann@uni-bonn.de

Date of Birth 14 DECEMBER 1993

Gender MALE

Supervisor 1 Dr. Christian Henkel

Research Molecular Spectroscopy, Star Formation, Active Galactic Nuclei, Physical Constants.

Supervisor 2 Prof. Dr. Karl M. Menten

Research Millimeter & Submillimeter Astronomy, (Sub)Millimeter Wavelength Studies of Asteroids and Comets, Molecular Clouds and Star Formation, Late Stages of Stellar Evolution, Astro-Chemistry, the Galactic Center and its Neighborhood, Dust and Molecules in External Galaxies, the Distant Universe and Cosmology, (Sub)Millimeter Wavelength Instrumentation.

Education

Ph.D. in Astronomy & Astrophysics, Max-Planck-Institut für Radioastronomie, Bonn, Germany, 2019 - now
M.S. in Astronomy, Center for Astronomy, Guangzhou University, China, 2016 - 2019
B.S. in Optical Information Science and Technology, School of Physics and Electronic Engineering, Guangzhou University, China, 2012-2016

PUBLICATIONS

1st author

(1).**Yan Y T**, Zhang J S, Henkel C, et al. A Systematic TMRT Observational Study of Galactic $^{12}C/^{13}C$ Ratios from Formaldehyde[J]. The Astrophysical Journal, 2019, 877(2): 154.

not 1st author

(2).Yu H Z, Zhang J S, Henkel C, **Yan Y T**, et al. Galactic Interstellar Sulfur Isotopes: A Radial $^{32}S/^{34}S$ Gradient?[J]. The Astrophysical Journal, 2020, 899(2): 145.

(3).Zhang J S, Liu W, **Yan Y T**, et al. A Systematic Observational Study on Galactic Interstellar Ratio $^{18}O/^{17}O$. I. $C^{18}O$ and $C^{17}O$ J = 1-0 Data Analysis[J]. The Astrophysical Journal Supplement Series, 2020, 249(1): 6.

(4).Zhang J S, **Yan Y T**, Liu W, et al. Systematic observations on Galactic Interstellar isotope ratios[J]. Proceedings of the International Astronomical Union, 2018, 14(A30): 278-279.

Academic Honors

2019-2022 A 3 years scholarship for Ph.D. studies from China Scholarship Council (CSC)
2019 Excellent Graduate Student
2018 Annual College scholarship
2017 Annual College scholarship
2016 Annual Graduate student Entrance scholarship
2015 The 13th Challenge Cup of Guangdong Undergrade Students Extracurricular Academic Science and Technology Competition Second Prize
2014 The 14th Guangzhou University Challenge Cup Competition First Prize
2014 Annual College scholarship
2014 Outstanding Student Leader
2013 Annual College scholarship
2013 Outstanding Student Leader

Telescope Proposals (accepted)

PI (1383.0 hours)

The 100-m Effelsberg Radio Telescope

1. *Silicon isotope ratios in the Milky Way*
   38.0 Hours (ID: 91-20) 2020
2. *Confirmation of new ammonia masers in three star-forming regions*
   5.0 Hours (ID: 13-20) 2020

The Karl G. Jansky Very Large Array

1. *Imaging the Newly Discovered Ammonia (9,6) Masers*
   1.0 Hours (ID: VLA/21A-157) 2020

The IRAM 30m Telescope

1. *Measurements of the gradients of isotope ratios $^{12}C/^{13}C$ and $^{14}N/^{15}N$ in our Galaxy from CN*
   74.0 Hours (ID: 004-20, 125-20) 2020
2. *3mm spectroscopic mapping toward W49A*
   33.0 Hours (ID: 117-20) 2020

The ARO 12 Meter Telescope

1. *Isotope ratio $^{12}C/^{13}C$ in Galactic molecular clouds*
   298.0 Hours 2018B, 2019A
2. *Isotope ratio $^{18}O/^{17}O$ in Galactic molecular clouds*
   172.0 Hours 2016B, 2017B
   Zhang et al. ApJS, 2020, 249(1): 6.
   Yu et al. ApJ, 2020, 899(2): 145.

The James Clerk Maxwell Telescope

1. *Isotope ratio $^{18}O/^{17}O$ in Galactic molecular clouds*
   165.0 Hours (ID: M16BP037, M16XP019, M19AP021) 2016B, 2016X, 2019A

The Shanghai Tianma 65m Radio Telescope

1. *Isotope ratio $^{12}C/^{13}C$ in Galactic molecular clouds*
   400 Hours. 2016-2019
   Yan et al. ApJ, 2019, 877(2): 154.

The Sub-Millimeter Radio Telescope

1. *Oxygen isotope ratio of $^{18}O/^{17}O$ in molecular clouds with different Galactocentric distance*
   197.0 Hours 2016A, 2017B

Co-I

The 100-m Effelsberg Radio Telescope

1. *Searching for H_2O megamasers in PG quasars*
   32.0 Hours (ID: 99-20) 2020
2. *Deuterated enhancement distribution of ammonia in massive star forming regions*
   16.0 Hours (ID: 89-20) 2020
3. *A Dark Cloud at Redshift $z = 0.89$?*
   8.0 Hours (ID: 14-20) 2020
4. *Systematic observations on NH_3 and $^{15}NH_3$ toward a large sample of star forming regions*
   55.0 Hours (ID: 93-19) 2019
5. *NH_3 mapping towards Massive Starless Clump Candidates*
   46.8 Hours (ID: 86-19) 2019
6. *A survey for H_2O megamasers in Seyfert 2 with Radio-bright nuclei*
   130 Hours (ID: 64-17) 2017

The IRAM 30m Telescope

1. *The interaction between H II regions and their neighbour massive clumps*
   33.0 Hours (ID: 128-20) 2020
2. *Measuring the Galactic sulfur isotope ratios toward massive star forming regions: a radial $^{32}S/^{34}S$ gradient?*
   50.5 Hours (ID: 022-20) 2020
3. *Oxygen-Burning, Neon-Burning and s-Process Nucleosynthesis: Interstellar Sulfur Isotopes*
   54.5 Hours (ID: 045-19) 2019
4. *Galactic Isotopic Ratio of $^{18}O/^{17}O$*
   67.2 Hours (ID: 013-16, 088-16) 2016
   Zhang et al. ApJS, 2020, 249(1): 6.

The ARO 12 Meter Telescope

1. *Oxygen isotope ratio of $^{18}O/^{17}O$ in the outer galactic disk*
   175 Hours 2018B
2. *Measuring isotropic ratios in Galactic massive star formation regions with sulfur isotopes*
   126 Hours 2018B
   Zhang et al. ApJS, 2020, 249(1): 6.
   Yu et al. ApJ, 2020, 899(2): 145.

The Shanghai Tianma 65m Radio Telescope

1. *A systematic cyanopolyynes line survey toward massive star formation regions*
   100 Hours 2018

Presentations

Carbon and Sulfur isotope ratios in our Galaxy and NGC 253.
-MPIfR group meeting, Bonn, Germany July, 2020

A Systematic TMRT Observational Study of Galactic $^{12}C/^{13}C$ Ratios from Formaldehyde.
-2019 Symposium on Molecular Cloud and Star Formation, Xinjiang, China July, 2019

Formaldehyde observations with TMRT.
-11th Jing-Guang-Xia Astrophysics Meeting, Guangzhou, China Nov., 2017

Experience

Observation experience > 2000.0 hours (on-site + remote) 2016 - 2021

The scientific writing workshop (online), Bonn, Germany June 8-June 11, 2020

2018 FAST Radio Astronomy Summer School July 8-July 13, 2018

2017 Radio Astronomy Summer School at Shanghai Astronomical Observatory July 9-July 14, 2017

2016 Annual Meeting of the Chinese Astronomical Society Nov. 1-Nov. 3 2016

James Clerk Maxwell Telescope (JCMT) Data Reductions and Analysis Workshop at Shanghai Astronomical Observatory Oct. 16, 2016

2015 Radio Astronomy Summer School at Shanghai Astronomical Observatory July 19-July 25, 2015