# 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 26 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 Aster-

oids 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 <sup>12</sup>C/<sup>13</sup>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 <sup>32</sup>S/<sup>34</sup>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 Astrophys-

ical 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.

Academ	ic
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

 Isotope ratio <sup>12</sup> C/<sup>13</sup> C in Galactic molecular clouds 400 Hours.
 Yan et al. ApJ, 2019, 877(2): 154.

2016-2019

#### 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

#### 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 <sup>12</sup>C/<sup>13</sup>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