

# **Jianhang CHEN**

+49 1627363870

Jianhang.Chen@eso.org
https://cjhastro.github.com
github.com/cjhastro
Karl-Schwarzschild-Strasse 2
85748, Garching bei München, Germany

#### **EDUCATION**

PhD of Science   Astrononmy	Sep. 2020 – Aug. 2023
European Southern Observatory   Supervisor: Prof. Rob Ivison	Garching, Germany
Master of Science   Astronomy	Sep. 2017 – Jun. 2020
Nanjing University   Supervisor: Prof. Yong Shi & Prof. Zhi-yu Zhang	Nanjing, China
Bachelor of Science   Physics	Sep. 2013 – May. 2017
Lanzhou University	Lanzhou, China

### Telescope Proposals and Observing Experience

# PI Proposals:

- IRAM30m Summer 2022 Delta, 095-22: The tip of the iceberg? 34.4 hrs, (PI. Jianhang Chen, A priority).
- ALMA Cycle-9, 2022.1.00495.S: *Isotopic constraints on the IMF in the most extreme star-forming environments in the Universe*, 23.7 hrs, (**PI: Jianhang Chen, A priority**).
- **JCMT** 22A, M22AP002: Revealing the structure around a putative new SMG proto-cluster core, 8.5 hrs, (**PI: Jianhang Chen, B priority**).
- ALMA Cycle-8, 2021.1.00458.S: Dust polarisation in distant, star-foming galaxies: a transformative survey of the viable targets, 25.1 hrs, (PI: Jianhang Chen, B priority).
- NEOMA Summer 2020, S20BB: Searching for molecular gas in HI-rich red spirals, 2.8 hrs, (PI: Jianhang Chen, B priority).

#### **Co-I Proposals:**

- ALMA Cycle-8, 2021.1.00018.S: Exploiting a snapshot survey of the 3,083 reddest Herschel sources to reveal distant protoclusters, 30.6 hrs, (PI. R. Ivison, CoI: Jianhang Chen).
- ALMA Cycle-8, 2021.1.01342.S: [CI] as a molecular gas tracer in star forming galaxies at high redshift, 9.6 hrs, (PI: M. Castillo, CoI: Jianhang Chen)
- VLA 2020B, 20B-180: Off-nuclear star formation in a gas-rich low-mass S0 galaxy, 27 hrs, (PI: Zhengyi Chen, CoI: Jianhang Chen)
- **NOEMA** Summer 2020, S20CK: *Exploiting a snapshot survey of the 3,083 reddest Herschel sources to reveal distant protoclusters*, 26 hrs, (PI: Vinodiran Arumgam, CoI: Jianhang Chen)
- **IRAM30m** Summer 2020, 062-20: *Do Changing-look AGNs reside in the gas-rich environment?*, 23.5 hrs, (PI: Xiaoling Yu, CoI: Jianhang Chen)

# **Observing Experience:**

• IRAM30m, NIKA2, 6 nights, 18-25 Oct. 2022

#### RESEARCH EXPERIENCE

# 11th NOEMA Interferometry School

Winter School

21-25 Nov. 2021 Grenoble, France

Short term visit, Durham University/Physics department

14-24 Sep. 2022

Host: Prof. Mark Swinbank Topic: dynamical modeling

Durham, UK

<b>Astrophysics, Formation and Evolution of Galaxy cluster Across Cosmic Time</b> Winter School	23 Nov1 Dec. 2021 Tenerife, Spain
10th IRAM 30-meter School on Millimeter Astronomy Winter School	15-23 Nov. 2021 Online
Astrostatistics and R training The 2nd East Asian Astrostatistics International Conference (EAAIC2018)	09-13 Jul. 2018 Nanjing, China
Conference and Seminar Talks	
ALMACAL IX: multi-band ALMA survey for dusty star-forming galaxies  A half-century of millimeter and submillimeter astronomy	15–23 Dec. 2022 Miyakojima, Japan
ALMACAL: Number counts and the resolved fractions of the CIB Meeting of ALMA Young Astronomers	3–4 Mar. 2022 Online
Submillimetre number counts 12th IMPRS Symposium	5–6 Nov. 2021 Garching, Germany
The spatial extension of AGN narrow line regions  MaNGA Collaboration Meeting	1–4 Apr. 2019 Oxford, UK
Posters	
ALMACAL: A 'free' submillimetre galaxy survey PoSTER 2022 - Galaxy Evolution (Best poster award)	3–5 May. 2022 Online
ALMACAL: Hunting for regions over-dense in SMGs XXXII Canary Islands Winter School of Astrophysics	23 Nov.–1 Dec. 2021 Tenerife, Spain
Community Involvement	
Scientific Assistant at ESO OPC P110 Helping to organise pannel discussion	May. 2022
Scientific Assistant at ESO OPC P109 Helping to organise pannel discussion	Nov. 2021
Organisor of student session of Munich Joint Astronomy Colloquium Helping to coodinate the discussion between students and the speaker	Nov. 2021
Member of LOC for the 11th IMPRS Symposium Helping to organise meeting schedule	May 2021
Scientific referee for Publications of the Astronomical Society of Japan	2020
Awards and Scholarship	
International Max-Planck Research Scholarship (IMPRS) on Astrophysics Grant for PhD study	2020-2023
Excellence Scholarship Nanjing University	Spring 2019
Outstanding Graduates Award Lanzhou University	Spring 2017
National Encouragement Scholarship Merit based scholarship for colleage students in China	2015,2016
The First Prize Scholarships Lanzhou University	Spring 2014

#### **SKILLS**

**Languages**: Chinese (Native), English (C1)

Programming: Python (NumPy, SciPy, Matplotlib, Pandas), MATLAB, Mathematica

Document Creation: HTML, LaTex, Markdown

Software: pPXF, CASA, CARTA, DS9, BBarolo, Galpak

#### **PUBLICATIONS**

### First author papers:

- "ALMACAL X: Extreme over-densities are not always signposts to proto-clusters a cautionary tale" Chen, Ivison, Zwaan et al. MNRAS. (in submission)
- "ALMACAL IX: multi-band ALMA survey for dusty star-forming galaxies and the resolved fractions of the cosmic infrared background" Chen, Ivison, Zwaan et al. MNRAS, (2022), arXiv:2210.09329
- "The spatial extension of extended narrow line regions in MaNGA AGN" Chen, Shi, Dempsey et al. MNRAS, 489, 855 (2019)

## **Co-author papers:**

- "The H I gas disc thickness of the ultra-diffuse galaxy AGC 242019 Li, Shi, Zhang et al. MNRAS, 516, 4220 (2022)
- "ALMACAL: Surveying the Universe with ALMA Calibrator Observations" Zwaan, Ivison, Peroux et al. The Messenger, 186, 10 (2022)
- "The major mechanism to drive turbulence in star-forming galaxies Yu, Bian, Krumholz et al. MNRAS, 505, 5075 (2021)
- "Probing possible effects of circumgalactic media on the metal content of galaxies through the mass-metallicity relationship Zhai, Shi, Chen et al. MNRAS, 504, 1959 (2021)
- "A Cuspy Dark Matter Halo Shi, Zhang, Wang et al. ApJ, 909, 20 (2021)
- "The impact of merging on the origin of kinematically misaligned and counter-rotating galaxies in MaNGA Li, Shi, Bizyaev et al. MNRAS, 501, 14 (2021)
- "Host galaxy properties of changing-look AGNs revealed in the MaNGA survey Yu, Shi, Chen et al. MNRAS, 498, 3985 (2020)
- "What drives the velocity dispersion of ionized gas in star-forming galaxies? Yu, Shi, Chen et al. MNRAS, 486, 4463 (2019)
- "An early-type galaxy with an inner star-forming disc Li, Shi, Chen et al. MNRAS, 480, 1705 (2018)