Chentao Yang

Dr. of astrophysics















As a trained astrophysicist, I have a solid knowledge in math and physics. My 10+ years experience in data analysis and modelling in observational astrophysics research has sharpened my data science skills and exploration spirits. I'm curious and versed in dissecting complex problems, while maintaining the balance intricate details with big-picture perspectives.

TOOL-SET











Shell (bash/zsh/csh), Julia, FORTRAN, Lang: IDL, Python (NumPy, Pandas, Astropy, Matplotlib, ...), Matlab, Mathematica

VS Code, Jupyter Lab, Git, LaTeX, LyX, S/W: Obsidian, Adobe Illustrator, FontLab MS Office (Excel, PowerPoint)...

LANGUAGE

English Full proficiency

Mandarin Native French Elementary **Swedish Beginner Spanish** Beginner

MISCELLANEOUS



Philosophy, Fiction, Science



🍿 Jazz, Classic, Soundtrack 🖏 Hiking, Citywalk



🕄 Sci-fi, Indie, Mystery

KEY COMPETENCES

- **Experience:** 10+ Years of data analytic experience in academia.
- Project management: 50+ Research Publications in top international journals (incl. Press Releases), with 1200+ Citations.
- Coding ability: 5+ Github Projects, 60+ Stars (using math tools like Bayesian/frequentist statistics/MCMC, and graphic design).
- Visualization & Storytelling & Communication: 15+ Oral **Presentations in top** international conferences (incl. invited).
- Writing skill & scientific excellence: 500+ hours Awarded PI Observing Telescope Time from 30+ project proposals.

WORK EXPERIENCE

Postdoctral Researcher in astrophysics (2021-current)

Chalmers tekniska högskola

- Analyzed large interferometric radio data sets of galaxies.
- Creative visualization of astronomical images and related physical parameters.
- Quantified data and interpreted results via mathematical & physical models.
- Leadership in international team for independent complete research projects.

Postdoctral Research Fellow in astrophysics (2017-2021)

European Southern Observatory (ESO)/Joint ALMA Observatory

- Prestigious fellowship in the leading astronomical research center, ESO (Chile).
- Hands-on with the most advanced ground-based observatory, ALMA.
- Independent research from ideas to publications.
- Leading international collaborations.

EDUCATION

PhD in Astrophysics (dual-diploma)

Université Paris-Saclay (2014-2017)

(Top 20 in Academic Ranking of World Universities)

University of Chinese Academy of Sciences (2013-2017)

(Top 70 in Academic Ranking of World Universities)

Master in Astrophysics

Beijing Normal Univesity (2010-2013)

Bachelor in Astronomy

Beijing Normal University (2006-2010)

(Graduate with distinguished honour, at both university and municipality levels)

SKILLS

Team work, Effective communication, Project management, Programming, Creative data visualization, Data intuition, Problem-solving, Critical thinking, Curiosity

AWARDS & PEER RECOGNITION

Referee & Expert Reviewer Committees

- Reviewer of several top internation astrophysical journals
- External reviwers of pretigous telescopes (JWST, HST...) & national funds (STFC...).

Several Scholarships and Funding Awards

- NAOC (National Astronomical Observatory of China) Scholarship
- National Undergraduate Innovative Test Program Grant (10k CNY)
- ESO Science Support Discretionary Fund (9k EUR)
- The LIA-Origins Short Visit Program Grant (3k EUR)

Fellowship

ESO Fellowship (Chile), 4-year independent research funding