YUNTING WANG

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EDUCATION

Department of Astronomy, Xiamen University   *Sep. 2017 - Present*
Bachelor of Science   Expected Graduation: Jun 2021

· GPA: 87.34/100 (Rank: 2/12)   TOFEL: 111/120 (Speaking: 27)   GRE: V162+Q170+AW4.0

PROGRAMMING EXPERIENCE

Python (Experienced):   Model Fitting, Data Reduction & Visualization
Basic Proficiency: Shell, C, R, SQL, CIAO, XSPEC, Machine Learning Algorithms

OBSERVING EXPERIENCE

Five-hundred-meter Aperture Spherical radio Telescope (FAST) (2020.9)
Probing the HI Gas Contents of Transitional Galaxies Indicated by the [NII]/[SII] ratios
ID: PT2020_0186, allocated **11.2 hours**

RESEARCH EXPERIENCE

Mapping the Star Formation Rate Change in M99 (NGC4254)   *Jun. 2020 - Present*
Advisor: Prof. Amelie Saintonge   *University College London*

· Mosaicked VLT MUSE (Multi Unit Spectroscopic Explorer) data cubes into one for NGC4254. Extracted and matched point-like sources to correct the coordinate shifts in the cubes.
· Fitted Hα lines on MUSE data cube. Smoothed MUSE data and combined it with GALEX (Galaxy Evolution Explorer) and SDSS data. Produced color-color plots to indicate the star formation history.
· Ran the CIGALE (Code Investigating GALaxy Emission) SED (Stellar Energy Distribution) code to model the spectra given different star formation histories, and compared them with observation.
· Currently working on improving the fitting accuracy using LZIFU(IDL fitting package based on pPXF), modeling non-parametric star formation histories through Prospector, and extending the study on other nearby galaxies, e.g. NGC5068 and NGC1365.

Exploring Transitional Galaxies Indicated by [NII]/[SII] ratios   *Jul. 2019 - Present*
Advisors: Prof. Lei Hao   *Shanghai Astronomical Observatory, Chinese Academy of Sciences*
        Prof. Taotao Fang   *Xiamen University*

· Motivated by the unusually high-[NII]/[SII]-ratio found in FUV-luminous galaxies noted in previous works.
· Explored distributions of [NII] and [SII] in SDSS IV MaNGA(Mapping Nearby Galaxies at APO) MPL-8 data of 6500 galaxies with their BPT classifications by mapping [Hα]/[NII] - [Hα]/[SII].
· Discovered five galaxies with unusually prominent [NII]/[SII] ratio, extracted spectroscopy and mapped their flux and dynamic properties to study possible mechanisms.
· Proposed to probe the HI gas contents of 5 galaxies with high [NII]/[SII] ratios and 11 with moderate [NII]/[SII] ratios through FAST.

HONORS & AWARDS

Xiamen International Bank Scholarship, Xiamen University (university-level)	03/2020
Undergraduate Research & Training Program Grant, Chinese Academy of Sciences	06/2019
Guangqi Scholarship of Shanghai Astronomical Observatory (specified in astronomy)	2018, 2019
Scholarship of Academic Excellence, Xiamen University (university-level)	2018, 2019