

JIANI YE

astronana.github.io

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RESEARCH INTEREST

Theoretical Cosmology
Computational Cosmology

EDUCATION

Nankai University *Sep. 2008 - Jul. 2012*
B.Sc. in Physics
GPA 89.4/100 (Overall), 90.2/100(Major)

University of Chinese Academy of Sciences *Oct. 2014 - Jul. 2017*
M.Sc. in Astrophysics(will be obtained in Jun. 2017)
Working at Shanghai Astronomical Observatory, Chinese Academy of Sciences
Having first year classes at the University of Science and Technology of China, GPA 91.1/100

RESEARCH OUTPUT/PUBLICATIONS

- ▷ “*Magneto-Thermal Disk Wind From Protoplanetary Disks*”, Xue-Ning Bai, **Jiani Ye**, Jeremy Goodman, Feng Yuan, published on ApJ, Volume 818, Number 2
- ▷ “*The Origin Of Galaxy Velocity Bias Using The Illustris Simulation*”, **Jia-Ni Ye**, Hong Guo, Zheng Zheng, Idit Zehavi, submitted to ApJ
- ▷ “*Superconducting Cosmic Strings As Sources Of Fast Radio Bursts*”, **Jiani Ye**, Kai Wang, Yifu Cai, to be submitted

RESEARCH EXPERIENCE

- Theoretical work on Higgs field driving Inflation** *Aug. 2011 - Feb. 2012*
Institution of Theoretical Physics, CAS, Supervised by Prof. Qingguo Huang
- Studied the physics of Inflation.
 - Derived and calculated scalar and tensor primordial perturbations.
 - Investigated the literatures on possibilities of Higgs field driving Inflation.
- Theoretical Work on a magnetic and thermal driving mechanism of wind from protoplanetary disks** *May. 2014 - Aug. 2015*
Spring School at Tsinghua University, USTC, Supervised by Dr. Xuening Bai
- Derived and numerically solved the magnetohydrodynamical equations of disk wind.
 - Investigated the properties of wind solutions for various parameter spaces.
- Statistical analysis of velocity bias between galaxies and haloes using hydrodynamical simulation ILLUSTRIS** *Sep. 2015 - Apr. 2016*
Shanghai Astronomical Observatory, Supervised by Prof. Hong Guo
- Extracted and organized data released by ILLUSTRIS.
 - Analysed dependences of galaxies and haloes’ velocity bias on various factors.

- Discussed underlying physics.

Theoretical work on using Fast Radio Burst(FRB) events to constrain parameters of superconducting cosmic strings(SCS)

May. 2016 - Sep. 2016

USTC, Shanghai Astronomical Observatory, Supervised by Prof. Yifu Cai

- Derived the power of electromagnetic radiations emitted from SCS using order of magnitude analysis .
- Investigated constraints of observed FRB events on SCS parameters.

HONORS AND AWARDS

Scholarships and Honors

- Merit Student of Nankai University, *2009*
- First Prize of Excellent Undergraduate Scholarship of Nankai University, *2009*
- Second Prize of Excellent Undergraduate Scholarship of Nankai University, *2010*
- Outstanding Students Basic Disciplines Scholarship of Nankai University, *2011*

Regional and National Contest

- First Prize in the Undergraduate Mathematical Contest of Tianjin (Science & Engineer), *2009*
- Second Prize in the Young Physicists' Tournament of Physics Department, Nankai University, *2009*
- Third Prize in the National Postgraduate Mathematic Contest in Modeling, *2016*

STANDARD TESTS

TOEFL	Reading:29; Listening:25; Speaking:22; Writing:25; Total:101/120 (Test date: May.2016)
GRE General	Verbal 149; Quantitative 170; Total 319/340; Analytical Writing 3.0 (Test date: Jul.2016)
GRE Physics Subject	880/990 (Test date: Oct.2016)

SKILLS

Computer Languages	Python, Matlab, C++, Fortran, javascript, html, css
Languages	Chinese(native), English(fluent), Japanese(intermediate)