



Research Field: EXOPLANETS

Focused Field: PLANET FORMATION AND EVOLUTION

SHORT BIO

I started my PhD degree in astrophysics at the Yunnan Observatories, Chinese Academy of Sciences, after obtaining a B.S. degree in Physics at Shanxi University in 2011. I followed Prof. Zhanwen Han to do the project about the hypervelocity stars.

In the winter of 2013, I was supported by the jointly financed Doctoral Promotion Programme between the Max Planck Society and the Chinese Academy of Sciences and stayed in the Max Planck Institute for Astrophysics until the end of 2016. During this period, I worked with Prof. Henk Spruit to do some projects about the evolution and disruption of close-in planets.

In 2019, I was offered a postdoctoral position at the State Key Laboratory of Lunar and Planetary Sciences, Macau University of Science and Technology.

My research interests focus on the formation and evolution of exoplanets. My present project is mainly about the accretion process of protoplanets and the evolution of star-planet systems. I also do some projects about high velocity objects (runaways, hypervelocity stars, high velocity white dwarfs) with my collaborators.

Postdoctoral Researcher

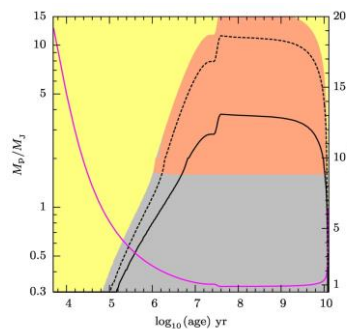
Shi Jia



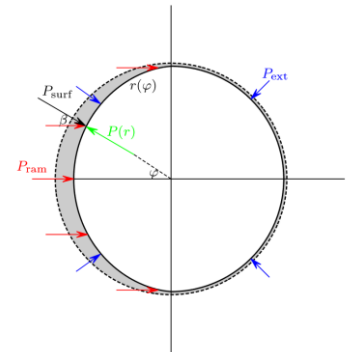
Ph.D. in Astrophysics, Yunnan Observatories, Chinese Academy of Sciences, China

MPG-CAS Joint Ph.D., Max Planck Institute for Astrophysics, Garching, Germany

B.S. in Physics (national science-training base), Shanxi University, China



Regimes of mass transfer for planet-star systems



Distortion model of a planet during its spiral-in

KEY PUBLICATIONS

Three new hypervelocity star candidates from *Gaia* DR2 with refined selection criteria. Li Jiao, **Jia Shi***, Gao Yan, et al., 2020, RAA, Volume, Issue 3 id.042, 15pp.

Research Progress of the Planet Population Synthesis (Chinese). Li Sinan, **Jia Shi***, Yu Cong, 2019, Progress in Astronomy, Volume 37, No. 3, 2019.

High Velocity Runaway Binaries from Supernovae in Triple Systems. Gao, Yan, Li Jiao & **Jia Shi**, 2019, MNRAS, Volume 487, Issue 3, p.3178-3182.

Disruption of a planet spiraling into its host star. **Jia Shi** & Spruit Henk, 2018, ApJ, Volume 864, Issue 2, article id.169, 12 pp.

Instability of mass transfer in a planet-star system. **Jia Shi** & Spruit Henk, 2017, MNRAS, Volume 465, Issue 1, p.149-160.

+: Co-corresponding author

*: Co-supervised

PROFESSIONAL EXPERIENCE

2019.09-present – Macau University of Science and Technology, Macau (China) – Post Doctoral.

2019.02-2019.08 – Yunnan Observatories, Chinese Academy of Sciences, China – Res. Asst.