

# Dongzi Li

---

<b>Citizenship</b>	Chinese	<b>gender</b>	female
<b>Email</b>	<a href="mailto:dongzili@caltech.edu">dongzili@caltech.edu</a>	<b>Github</b>	<a href="https://github.com/fleaf5/">https://github.com/fleaf5/</a>

## Appointments

2020-now     Sherman Fairchild Postdoctoral Scholar Research Associate  
California Institute of Technology

## Education

2016-2021     PhD. Physics  
University of Toronto/ Canadian Institute for Theoretical Astrophysics, Canada

2015-2016     MSc. Physics (Perimeter Scholar International)  
University of Waterloo/ Perimeter Institute for Theoretical Physics, Canada

2011-2015     BSc. Astronomy  
Nanjing University, China

## Major collaboration

2019-now     CHIME/FRB collaboration

2020-now     GMRT/FRB collaboration

2021-now     FAST FRB key project

## Selected Presentations

**2022 Green Bank Observatory community webinars (invited)**  
*"The magneto-active environment near FRBs and pulsars"*

**2022 UChicago KICP seminar, Chicago, US (invited)**  
*"The mystery of fast radio burst, the potential and the limit"*

**2021 FRB 2021, virtual**  
*"Emission Properties of Periodic Fast Radio Bursts from the Motion of Magnetars"*

**2021 16th Marcel Grossman Meeting, virtual (invited)**  
*"long-term periodicities in FRB burst times"*

**2021 Colloquium in ASTRON, Amsterdam, Netherlands (invited)**  
*"High-resolution study with interstellar lenses"*

**2020 FRB 2020, Virtual Conference**  
*"Periodic Activity from a Fast Radio Burst Source"*

**2019 Gravity Meets Plasma Workshop, Kunming, China**  
*"Plasma lensing birefringence: An Overview"*

**2019 Meterwave Sky II, Pune, India**  
*"Plasma lensing birefringence: a magnetic zoo"*

**2018 Scintillometry Workshop, Shanghai, China**  
*"Pulsar emission region holography with plasma lensing"*

**2018 The International Pulsar Timing Array Science meeting, Albuquerque, United States**  
*"Under-standing radio pulse propagation and delay"*

**2017 Scintillometry Workshop, Toronto, Canada**  
*"Constraining magnetic fields with a birefringent lens"*

## Allocations

### **Effelsberg 2022: 24h**

High-frequency polarimetry of repeating FRBs in magneto-active environments

### **FAST 2021: A (8h) B(12h) C(30h)**

Targeted Observations of Local Universe Fast Radio Bursts

### **VLBA DDT 2021:6h**

VLBA milliarcsecond localization of FRB 20201124A

### **GMRT Cycle 40 (2021): 24h**

Constraining models of the Repeating FRB 180916.J0158+65 with Polarization

### **Parkes 2019 OCT: 8h**

Testing models of interstellar scintillation with the Vela pulsar

### **GMRT Cycle 33 (2017): 6h**

Probing Differential Faraday Rotation of Vela

Co-I of 10 GMRT proposals and 1 Arecibo proposal.

- **Instrumental:** 2016-2020 Visit Algonquin radio telescope three times a year, debugging/installing feeds.

## Supervising Experience

- 2020-2022                      Suryarao Bethapudi(grad)                      *GMRT FRB polarization study*  
Co-supervised with Laura Spitler
- 2018-2021                      Akanksha Bij (Research Assistant)                      *Abnormal behaviors from Crab Giant Pulse*  
Co-supervised with Dr. Hsiu-hsien Lin and Prof. Marten van Kerkwijk
- 2019-2020                      Hengrui Zhu (Undergrad)                      *VLBI Study of Vela Pulsar*
- 2018-2018                      Kayenta Schmidt (Undergrad)                      *Searching De-polarization from Crab Giant Pulse*
- 2017-2018                      Steven Ufkes (Master)                      *Optimizing Toeplitz Matrix De-convolution Algorithm*  
Co-supervised with prof. Ue-Li Pen
- 2016-2017                      Visal Sok (Undergrad)                      *Optimizing Toeplitz Matrix De-convolution Algorithm*

## Teaching/Outreach

2022	Public talk: Youtube/Weibo	Fast radio bursts
2020	Guest lecture: 30 students	Application of Radio Propagation Effects
2019	Public talk: 50 audiences	Sensing hidden signals with pulsars
2019	Tutorial: 50 students	Electricity and Magnetism
2018	Online tutorial: 40 students	Physics of Music
2016-2017	Lab demonstrator: 30 students	Introduction to physics