# NANOGrav Fall 2024 Student Workshop
## University of Michigan, Ann Arbor, MI

October 5th – 6th
Schedule updated: October 2nd, 2024

**Main Location:** Literature Science & Arts Building (LSA Building), Room 1280
500 State Street, Ann Arbor, MI 48109

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## Saturday, October 5th

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9:00 – 10:30 **Session A: Welcome and Introduction**
**Speaker:** Michael Lam and Adam Brazier
**Activity Breakout:** Introduction to Python or Introduction to Statistics for Pulsar Timing Arrays

10:30 – 11:00 **Coffee Break**

11:00 – 12:30 **Session B: Pulsar Timing**
**Speaker:** Michael Lam
**Activity Breakout:** An Introduction to PINT

12:30 – 2:00 **Lunch**

2:00 – 3:30 **Session C: Noise Budget**
**Speaker:** Michael Lam
**Activity Breakout:** Understanding Chromatic Effects

3:30 – 4:00 **Coffee Break**

4:00 – 5:30 **Session D: Pulsar Timing + Noise Budget**
**Speaker:** Michael Lam
**Activity Breakout:** Practical Timing and Noise Modeling in PINT and `enterprise`

## Sunday, October 6th

9:00 – 10:30 **Session E: Gravitational Wave Detection**
**Speakers:** Gabe Freedman and Shashwat Sardesai
**Activity Breakout:** Bayesian Statistics, MCMC, & GW Searches with `enterprise`

10:30 – 11:00 **Coffee Break**

2:00 – 3:30 **Session F: Detection/Astrophysics Activity**
**Speakers:** Gabe Freedman, Shashwat Sardesai
**Activity Breakout:** Frequentist Statistics & Constructing a Gravitational Wave Background with `holodeck`

12:30 – 2:00 **Lunch**

11:00 – 12:30 **Session G: Gravitational Wave Astrophysics**
**Speakers:** Polina Petrov
**Activity Breakout:** Individual Supermassive Black Hole Binaries and Continuous Gravitational Waves

3:30 – 4:00 **Coffee Break**

4:00 – 5:30 **Session H: CV / Resume Workshop**

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*NANOGrav is very grateful to the University of Michigan's Department of Astronomy for hosting the NANOGrav Fall 2024 Collaboration Meeting's Student Workshop. We also extend our gratuity to those who have dedicated their time towards making this workshop possible, including: Michael Lam (SWOC Chair), Adam Brazier, Fronefield Crawford, Tim Dolch (SOC Chair), Gabe Freeman, Joe Glaser, Kayhan Gultekin (LOC Chair), Polina Petrov, Sashwat Sardesai, David Wright, and Olivia Young.*