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## Laura Cui

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### Education

#### Massachusetts Institute of Technology

*Bachelor of Science in Physics and Mathematics*

- GPA: 5.0/5.0
- Expected graduation: June 2023
- Relevant coursework: Graduate Statistical Mechanics I, Probability and Random Variables, Quantum Information Science I-II, Functional Analysis

Activities: Educational Studies Program, Undergraduate Mathematics Association, Borderline

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### Experiences

JUNE 2020 - AUGUST 2020

#### MIT Research Laboratory of Electronics - Undergraduate Student Researcher

- Advised by Prof. Dirk Englund and Dr. Carlos Errando Herranz
- Develop bond-orbital model for strain-induced second order corrections to optical susceptibility in non-centrosymmetric materials

JANUARY 2020

#### J.P. Morgan Chase & Co. - Quantitative Research Intern, Rates Data Analytics

- Develop and implement predictive models for fixed income trading

JUNE 2018 - AUGUST 2018

#### Maryland Center for Fundamental Physics - Research Assistant

- Advised by Prof. Thomas D. Cohen
- Reduced doubly heavy tetraquarks to two-body system in formal heavy mass limit and used toy models with radial effective potential to solve numerically
- Showed systems with single state are weakly bound regardless of short distance interactions

NOVEMBER 2017 - JULY 2020

#### Art of Problem Solving Academy Gaithersburg - Teaching Assistant

- Assisted with High School Contest Math and Math Beasts 7-9 summer camps
  - Performed grading, outreach, and front desk tasks
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### Additional Skills

- Proficient in Python, Java, C++, Mathematica, and MATLAB
  - Experience with data science libraries and machine learning
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### Awards and Honors

2019 **Regeneron Science Talent Search Scholar**

*For work with near-threshold doubly heavy tetraquark states*