

# Foster (Yun-Fei) TENG

University of Toronto | [foster.teng@mail.utoronto.ca](mailto:foster.teng@mail.utoronto.ca)

## RESEARCH INTERESTS

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Mathematical Physics, Partial Differential Equations, Algebra

## EDUCATION

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**University of Toronto** (cGPA: 3.85/4.0) Fall 2022 - Present  
Honours Bachelor of Science (HBSc), Physics and Mathematics Specialist

## HONORS & AWARDS

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NSERC Undergraduate Student Research Award (USRA) - CAD 7,500 Summer 2025  
The Class of 3T0 and Associates Scholarship in Mathematics and Physics - CAD 1,910 2024  
University of Toronto Dean's List 2023, 2024, 2025

## RESEARCH EXPERIENCE

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**Visualization of Algebraic Structures**(Advisor: Professor Camelia Karimianpour) Summer 2025  
Visualization of finite cyclic groups and their products, Cayley tables, Cayley diagrams, using MATLAB  
**Geodesic Trajectories on Hyperbolic Space**(Advisor: Professor Wenyu Pan) Winter 2025  
Hyperbolic Geometry, Horocycles and Busemann Cocycles, Fuchsian Groups and Dirichlet Domains

## ACADEMIC PROJECTS

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**The Least Action Principle for the Einstein Field Equation**(Course Instructor: Professor Robert McCann)  
Derivation of the Einstein Field Equation using variational calculus, including proving Palatini identity, Jacobi's formula, etc. Winter 2025

### Functions Grapher

In Course Python Project, programmed by Matplotlib Fall 2022

### MTA Data Analytics Case Competition

Sports Analytics, Python, CSV, & API, and Data Visualization using PowerBi Fall 2022

## TALKS

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### Visualization of Algebraic Structures

Summer Undergraduate Research Seminar, University of Toronto Summer 2025

## WORK EXPERIENCE

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### Videographer and Classroom Support Specialist

Record lectures, and troubleshoot computing or equipment issues in classrooms in UofT Winter 2023

## VOLUNTEER

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### University Events Voter

Attend regular advisory committee meeting and vote for important events in UofT Fall 2022