

# ELite Program

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# Why Applied Math and Elite Program?

Why applied math?

- Closer connection with our world:
- Apply mathematics to change the world
- Seek inspiration from the world for mathematics

Why elite program?

- Enhance my research taste and ability
- A platform for better communication and cooperation
- An impetus to do research instead of overfitting

# Grade

Basic parameters:

- GPA 3.9+ Rank 2/241

Notable course taken/taking:

- Mathematical Methods of Classical Mechanics (G)
- Advanced Multivariate Statistical Analysis (G)
- Mathematical Introduction to Machine Learning (G)
- Applied Stochastic Calculus (G)
- Game Theory
- General Physics I&II

# Research Interests

Deep learning theory:

- Generalization
- Training Dynamics

Scientific machine learning:

- Learning the solution map of PDE
- Combining scientific laws and machine learning methods

And More...

- Out of distribution inference
- Phase transition
- Random matrices
- ...

- paper
- . . .