

LIHAO YAN

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EDUCATION

Yale University

May 2027

Ph.D. in Physics

University of Notre Dame

May 2021

B.S. in Physics (Honors)

Double Major in Philosophy

GPA: 3.904

Honors: Dean's Award, *cum laude*

RESEARCH EXPERIENCE

Computational Neuroscience

On Going

New Haven, CT

- Supervised by my Ph.D. advisor Prof. Monika Jadi on computational neuroscience
- **Analyzing electrophysiology data recorded in macaques' visual cortical regions V1 & V4**
- Preprocessing the local field potential data with bandpass filter and the Hilbert Transformation
- Analyzing the traveling wave type patterns in the transformed local field potential
- Studying the origins of the traveling waves and showed that the input layer of the visual cortex is the least likely location of the origin of the wave

Theoretical Condensed Matter Physics

2022

New Haven, CT

- Worked on using information geometry to study spin glass systems under the direction of Prof. Nicholas Read at Yale University
- Investigated how the divergence of mutual information between the pure states of a spin glass relates to the spin-spin correlation functions

TECHNICAL SKILLS

Programming

C/C++, Python, Unix Shell Scripting,
MATLAB, Mathematica

Others

Linux, Git, L^AT_EX