# **Weiheng Tang**

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#### **EDUCATION**

09/2020-present School of Physics, PEKING UNIVERSITY

Beijing, China

• Major GPA: 3.82/4.0

• Computer Skills: Python (pytorch, jax), C/C++, CUDA, Mathematica, Latex, etc.

#### RESEARCH

Mar. 2022 - Sep. 2022 Advisor: Prof. Renmin Ma, Peking University

### Research on the non-Hermitian phenomenon in the optical resonant cavity

• Constructed a COMSOL model to simulate the Whispering Gallery Mode of the electromagnetic field in the laser cavity to emit a vortex light field.

Sep. 2022 – Present Advisor: Prof. Kebin Shi & Prof. He Sun, Peking University

#### Research on microscopy

- Read papers about physics models and algorithms in computational imaging.
- Reproduced the result of dynamic SIM with a neural space-time model proposed by Laura Waller Lab.
- Working on the integration of different imaging modalities now to gain better imaging quality.

## RESEARCH INTEREST

- Bio-Medical Imaging (ODT, SIM, etc.), including principle, experiment and algorithm.
- Computational photography, with help from advanced algorithms.

### SELECTED COURSES

Methods of Mathematical Physics (I)	95	Computational Physics	96
Solid State Physics	93	Theoretical Mechanics	95
Electrodynamics	91	Probability and Statistics	99
Machine Learning and Artificial Intelligence	97.5	Modern Physics Laboratory (I)	89

#### **MISCELLANEOUS**

•	Peking University Award for Merit Student	09/2021
•	Peking University Award for Excellent Academic Performance	09/2021
•	Gold Medal in the 36th China Physics Olympics final (national level)	09/2019