Yisi Liu

Gender: Male
Age: 21
Academic Interest: Mathematical Physics

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Education

•School of Physics and Astronomy, Sun Yat-sen University(expected) *2020.9-2024.7*
Major in Physics GPA:4.147/5 Rank: 6/126(4.7%)

• School of Mathematics(ZhuHai), Sun Yat-sen University(expected) *2022.9-2024.7*
Minor in Mathematics and Applied Mathematics GPA:4.0/5

Scientific Research Experience

•The Gamma Ray Integrated Detectors(GRID) team of Sun Yat-sen University *2021.9-2023.1*
A student project on studying gamma ray burst(GRB), launched by Tsinghua University in 2015.
– My Duty: Leader of Theory Group
– My Work: Studying the theoretical models, Simulating the motion of photons via Geant4, Data processing

•The Feasibility Analysis of Solar Wind Measurement Using GRID Satellite *2021.12-2022.12*
2021-2022 innovation program for college students
– My Duty: Leader of the team
– My Work: Simulating the motion of solar wind particles via Geant4, Designing the detector(GAGG scintillator)

Summer School

•GRID Summer Camp 2022 *2022.8-2022.9*
Summer Camp for GRID members, organized by TsingHua University
– What I Learned: method of processing GRB data to get energy spectrum and light curve

Awards

•2021 Asia and Pacific Mathematical Contesst in Modeling(APMCM), Second Prize

•2021 The 11th MathorCup College Mathematical Modeling Challenge , First Prize

•2020-2021 Sun Yat-sen University Outstanding Scholarship, First Prize

•2021-2022 Sun Yat-sen University Outstanding Scholarship, Second Prize

•2021 Fourth National College Student Mathematics Competition Online Challenge, First Prize

Acquired Knowledge for Future Study

•Physics: Quantum Mechanics, General Gravity

•Math: ODE, Mathematical Analysis, Higher Algebra, Complex Function

•Mathematical Physics: Mathematical Methods of Classical Mechanics(partial)

Future Plan

1. Continue to accumulate mathematical and physical knowledge in my last undergraduate career. Quantum field theory, mathematics for classical mechanics and mathematics for quantum field will be primarily considered.
2. During the first year of graduate school, I plan to continue to learn mathematical theory and physical theory for quantum field with different aspects(algebra and topology). The next year I schedule to learn string theory.
3. Keep concerning the news of quantum gravity and attending seminars with respect to it before graduate career. Start reading papers related to quantum gravity after becoming a graduate student.
4. Do English reading and writing exercises persistently in order to assist in the development of research work.

More detailed information can be found here