# **Curriculum Vitae**

Hao Zuo hzuo1@lsu.edu (864) 202-7903

### **Education**

Lanzhou University (2008-2012)

B.S. in Mathematics

Major, Pure and Applied Mathematics

Thesis advisor: Chunyou Sun and Chunyu Qiu

National Chiao Tung University (02/2011-07/2011)

Major, Physics

Exchange student in Department of Electrophysics

Clemson University (2014-2017)

M.S. in Mathematics

Major, Analysis and Applied Mathematics

Thesis advisor: Jeong-Rock Yoon

Louisiana State University (2018-)

M.S. in Mathematics (2018-2020)

Major, Analysis and Applied Mathematics

P.h.D. student in the Department of Physics & Astronomy (2020-)

Major, nuclear physics

### Position in SpaRTAN physics laboratory

Research scientist

### Research Advisor

Dr. Jeff Chancellor

## **Personal Statement**

I am a research scientist in SpaRTAN group at LSU, and my research topic is Comparison of the Angular Dependence of Monte Carlo Particle Transport Modeling Software. We will show that there is an unacceptable angular discrepancy in modeling off-axis fragments produced by inelastic nuclear interaction of the primary ion. These results will be compared to published measurements of 400 MeV/nucleon carbon beams interacting in C, CH2, Al, Cu, Sn, and Pb targets.

### Dissertation

Hao Zuo, Chunyou Sun, Chunyu Qiu, the Approximation of Fractional Laplacian by the Operator Defined on Bounded Domains.

Hao Zuo, Jeong-Rock Yoon, Existence and Uniqueness of General Linear Viscoelasticity Wave Equation.

Hao Zuo, Lyapunov Functions.

## **Work Experience**

07/2009-08/2009, doing field archaeological survey of cultural relics in Xinglong village, Maliutan village, and Pingan village of Zhenba county in Hanzhong for the Third Investigation of Cultural Heritage in China.

07/2010-08/2010, processed data and input the data into computers at the Holy Water Temple in Nanzheng county for the Investigation of Cultural Heritage in Hanzhong city.

01/2014-08/2015, graduate grade assistant at Clemson University.

09/2015-12/2015, undergraduate instructor of MATH 1020 at Clemson University.

01/2016-08/2016, graduate teaching assistant at Clemson University.

09/2016-12/2017, undergraduate lab instructor of MATH 2301 at Clemson University.

10/2019-12/2019, graduate student tutor in center for academic success at LSU.

08/2020-12/2020, graduate teaching assistant in the Department of Experimental Statistics at LSU.

01/2021-, graduate teaching assistant in the Department of Physics & Astronomy at LSU.

### Honors/Awards

10/2009, the tug of war groups in third, Lanzhou University.

09/2009-07/2010, awarded a second-class scholarship, Lanzhou University.

02/2011-07/2011, exchange student to NCTU (National Chiao Tung University) in Taiwan.

(Only five students got the chance to be exchange students from Lanzhou University to NCTU, and I am the only student from the Department of Mathematics.)

06/2012, recommended for graduate study exempt from the Graduate Entrance Examination at Lanzhou University.