

# Tiankui Zhang

PHD CANDIDATE IN PHYSICS, UNIVERSITY OF ARIZONA, TUCSON AZ, USA

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## Education

### University of Arizona

PHD IN COMPUTATIONAL BIOPHYSICS, GPA: 4.0/4.0

- Advisor: Prof. [Charles Wolgemuth](#)

[Tucson, AZ, USA](#)

*Aug 2014 - July 2020*

### Wuhan University

BACHELOR OF SCIENCE IN PHYSICS, GPA: 3.85/4.0

- Top-Notch Students Scientific Development Program (Physics)
- Advisor: Dr. [Eugene Lim](#) (King's College London)

[Wuhan, Hubei, PRC](#)

*Sep 2010 - May 2014*

### King's College London

INTERNATIONAL STUDENT EXCHANGE PROGRAM

[London, UK](#)

*Sep 2013 - May 2014*

## Experience

### University of Arizona

RESEARCH ASSISTANT AND TEACHING ASSISTANT

- Served as teaching assistant for various undergraduate physics and astronomy courses
- Developed a three dimensional massively parallel numerical framework for the simulation of single phase and biphasic vesicles coupled with protein kinetics with professor Charles W. Wolgemuth

[Tucson, AZ, USA](#)

*Aug 2014 - present*

## Skills

### Languages

- Chinese — native
- English — full professional proficiency

### computer

- Proficient in programming with Matlab, CUDA C/C++; Using python

### Applied Mathematics

- Numerical Methods for PDEs: finite difference, finite element, finite volume, level set method
- High Performance Computing: CUDA, OpenMP
- three years of experience in computational fluid dynamics, computational geometry

## Publication

- **Tiankui Zhang** and Charles W Wolgemuth. Sixth-order accurate schemes for reinitialization and extrapolation in the level set framework. *Journal of Scientific Computing*, 83(2), 2020.

## Manuscripts

- **Tiankui Zhang** and Charles W Wolgemuth. Massively Parallel Simulation of Shape Dynamics of Single Phase and Biphasic Vesicles Coupled with Protein Kinetics.

## Honors and Awards

- 2019 **top 10%**, College of Science Galileo Circle Scholarship
- 2014 **top 5%**, Honor Graduate Award of Hongyi School
- 2013 **top 10%**, CSC Visiting Student Scholarship

[University of Arizona](#)

[Wuhan University](#)

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