

## 工作经历

2011.6—2013.8, 重庆大学数学与统计学院 讲师  
2012.1—2014.1, Alberta大学应用数学系 博士后  
2013.9—今, 重庆大学数学与统计学院 副教授

## 研究方向

主要研究方向为偏微分方程数值解, 科学计算等。

## 科研项目

主持国家自然科学基金青年基金, 重庆市自然科学基金各一项。参与国家自然科学基金重点项目一项, 面上项目多项。

## 主讲课程

数值分析, 数值分析绪论, 计算方法, 偏微分方程数值解, 有限元方法等

## 学术与社会兼职

International Journal of Numerical Analysis and Modeling, Assistant Editor,  
中国数学学会计算数学分会委员  
《数学评论》评论员

## 主要成果

在粘性(粘弹性)流体方程的数值分析与模拟、散射问题的算法设计与分析、浸入有限元方法和奇异摄动方程的算法设计与分析等方面取得了一些结果, 在SCI期刊上发表学术论文30余篇。代表作有:

1. Ming Sun, Xinlong Feng, **Kun Wang\***, Numerical simulation of binary fluid–surfactant phase field model coupled with geometric curvature on the curved surface, *Computer Methods in Applied Mechanics and Engineering*, 367 (2020) 113123.
2. Huili Zhang, Xinlong Feng, **Kun Wang\***, Long time error estimates of IFE methods for the unsteady multi-layer porous wall model, *Applied Numerical Mathematics*, 156 (2020) 303–321.
3. **Kun Wang\***, Yau Shu Wong, Jizu Huang, Analysis of pollution-free approaches for multi-dimensional Helmholtz equations, *International Journal of Numerical Analysis and Modeling*, 16 (2019) 412–435.
4. **Kun Wang**, Jizu Huang\*, A fast algorithm for the Caputo fractional derivative, *East Asian Journal on Applied Mathematics*, 8(2018) 656–677.
5. **Kun Wang\***, Yaushu Wong, Is pollution effect of finite difference schemes avoidable for multi-dimensional Helmholtz equations with high wave numbers? *Communications in Computational Physics*, 21(2017)490–514.
6. **Kun Wang\***, Yaushu Wong, Jian Deng, Efficient and accurate numerical solutions for Helmholtz equation in polar and spherical coordinates, *Communications in Computational Physics*, 17 (2015) 779–807.
7. **Kun Wang\***, Yaushu Wong, Error correction method for Navier–Stokes equations at high Reynolds numbers, *Journal of Computational Physics*, 255 (2013) 245–265.
8. **Kun Wang\***, Yanping Lin, Yinnian He, Asymptotic analysis of the viscoelastic Oldroyd fluid motion equations, *Discrete and Continuous Dynamical Systems – Series A*, 32 (2012) 657–677.
9. **Kun Wang\***, Yinnian He, Yanping Lin, Long time numerical stability and asymptotic analysis for the viscoelastic Oldroyd flows, *Discrete and Continuous Dynamical Systems– Series B*, 17 (2012) 1551–1573.
10. **Kun Wang**, Yinnian He\*, Yueqiang Shang, Fully discrete finite element method for the viscoelastic fluid motion equations, *Discrete and Continuous Dynamical Systems – Series B*, 17 (2012) 1551–1573.