

# 安荣 (博士, 教授)

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## 教育背景

2005 年 3 月  
-2008 年 7 月 **博士研究生**, 西安交通大学理学院, 理学博士.

2002 年 9 月  
-2005 年 3 月 **硕士研究生**, 西安交通大学理学院, 理学硕士.

1998 年 9 月  
-2002 年 7 月 **本科**, 西安交通大学理学院, 理学学士.

## 经历

### 工作经历

2019 年 01 月  
-现在 **教授, 硕士生导师**, 温州大学数理与电子信息工程学院.

2010 年 11 月  
-2018 年 12 月 **副教授, 硕士生导师**, 温州大学数学与信息科学学院.

2008 年 7 月  
-2010 年 10 月 **讲师**, 温州大学数学与信息科学学院.

### 学术交流经历

2009 年 7 月 **访问学者**, 中国科学院数学与系统科学研究院计算数学研究所.

2015 年 3 月  
-2015 年 9 月 **访问学者**, 香港城市大学.

2017 年 7 月 **访问学者**, 香港城市大学.

### 教学经历

2008 年 9 月  
-至今 **讲授课程**.

- 数学分析
- 高等数学
- 数学物理方程
- 微分方程基础

○ 应用微分方程

○ 有限元方法

## 研究方向

- 1 非线性抛物方程的数值算法
- 2 Navier-Stokes 方程的理论和数值算法
- 3 有限元方法

## 荣誉和奖励

- 1 浙江省高校优秀青年教师资助计划 (2009)
- 2 温州市“551 人才工程”第三层次 (2010)
- 3 温州市“551 人才工程”第二层次 (2012)
- 4 浙江省中青年学科带头人 (2013)
- 5 温州大学新湖青年学者 (2018)

## 主持和参与项目

### 教学项目

2012–2015 **《数学物理方程》教学改革与探索**, 温州大学教学改革项目.

主持

### 学术项目

2018 年 1 月  
–2021 年 12 月 **变密度不可压缩 Navier-Stokes 方程具有保结构形式的若干高效分裂算法研究**, 国家自然科学基金 (面上项目), (11771337).

主持

2016 年 1 月  
–2018.12 月 **变密度不可压缩 Navier-Stokes 方程数值方法的研究**, 浙江省自然科学基金 (一般项目), (LY16A010017).

主持

2012 年 1 月  
–2013.12 月 **Navier-Stokes 型变分不等问题的两重网格及其后处理算法的研究**, 浙江省自然科学基金 (一般项目), (LY12A01015).

主持

2010年1月  
-2012.12月

旋转障碍下不可压缩粘性流体数值方法的研究, 国家自然科学基金 (青年项目),  
(10901122).

主持

## 论文

### 学术论文

- [1] Rong An, Yuan Li, Kaitai Li, Finite element approximation for fourth-order nonlinear problem in the plane, **Applied Mathematics and Computation**, Vol. 194(1), pp.143-155, 2007.
- [2] Yuan Li, Rong An, Kaitai Li, Some optimal error estimates of biharmonic problem using conforming finite element, **Applied Mathematics and Computation**, Vol. 194(2), pp.298-308, 2007.
- [3] 李媛, 安荣, 李开泰, 一个新 Pohozaev 恒等式及其在四阶拟线性椭圆方程中的应用, **西安交通大学学报 (自然科学版)**, Vol. 41(10), pp.1245-1247, 2007.
- [4] Rong An, Kaitai Li, Variational inequality for the rotating Navier-Stokes equations with subdifferential boundary conditions, **Computers and Mathematics with Applications**, Vol. 55(3), pp.581-587, 2008.
- [5] Kaitai Li, Rong An, On the rotating Navier-Stokes equations with mixed boundary conditions, **Acta Mathematica Sinica-English Series**, Vol. 24(4), pp.577-598 2008.
- [6] Rong An, Kaitai Li, Yuan Li, Solvability of the 3D rotating Navier-Stokes equations coupled with a 2D biharmonic problem with obstacles and gradient restriction, **Applied Mathematical Modelling**, Vol. 33(6), pp.2897-2906, 2009.
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- [8] Rong An, Discontinuous Galerkin Finite Element Method for the Fourth-Order Obstacle Problem, **Applied Mathematics and Computation**, Vol. 209(2), pp.351-355, 2009.
- [9] 安荣, 张正策, 李媛, 李开泰, 具有指数增长的非线性 P-双调和问题解的存在性和非存在性, **数学年刊**, Vol. 30(1), pp.1-12, 2009.
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- [13] Rong An, Kaitai Li, The boundary integral method for the linearized rotating Navier-Stokes equations in exterior domain. **Applied Mathematics and Computation**, Vol. 216(9), pp.2671-2678, 2010.
- [14] 安荣, 李开泰, Plate Contact 问题的混合有限元逼近, **数学物理学报**, Vol. 30(3), pp.666-676, 2010.

- [15] Yuan Li, [Rong An](#), Semi-discrete stabilized finite element methods for Navier-Stokes equations with nonlinear slip boundary conditions based on regularization procedure, **Numerische Mathematik**, Vol. 117(1), pp.1-36, 2011.
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- [17] [Rong An](#), Yuan Li, Kaitai Li, Fundamental solution of rotating generalized Stokes problem in  $R^3$ , **Acta Mathematicae Applicatae Sinica, English Series**, Vol. 27(4), pp.761-768, 2011.
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- [22] 安荣, 李媛, 具有梯度限制的四阶障碍问题的增广 Lagrange 迭代方法, **计算数学**, Vol. 35(1), pp.11-20, 2013.
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- [33] [Rong An](#), Accuracy analysis of the boundary integral method for steady Navier-Stokes equations around a rotating obstacle, **Acta Mathematicae Applicatae Sinica, English Series**, Vol. 32(2), pp.529-536, 2016.
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## 指导硕士生

- 2011 级 王贤
- 2012 级 刘安, 张雨晴
- 2015 级 周燊
- 2016 级 龚欢
- 2017 级 张超

2018 级 武静珂

## 指导本科生竞赛

- 2017 年 美国大学生数学建模竞赛二等奖
- 2011, 2018 年 全国研究生数学建模竞赛三等奖

## 科研获奖

- 王玮明, 赵才地 [安荣](#), 等 种群动力学和流体力学中若干偏微分方程问题的定性和算法研究, **浙江省自然科学三等奖**, 2015