

<p>个人简介：</p>	<p>安荣，男，1980年8月生，山西太原人。温州大学数学与信息科学学院，博士，副教授，硕士生导师。1998年—2008年就读于西安交通大学理学院，师从李开泰教授，获理学博士学位。2009年入选浙江省高校优秀青年教师资助计划，2010年入选温州市551人才第三层次，2012年入选温州市551人才第二层次，2013年入选浙江省高校中青年学科带头人培养人选。担任 Numerische Mathematik, Numerical Methods for Partial Differential Equations, Applied Numerical Mathematics, Journal of Computational and Applied Mathematics, Boundary Value Problems, Numerical Functional Analysis and Optimization, 应用数学学报等期刊的审稿人</p>
<p>担任课程：</p>	<p>《高等数学B》《高等数学续》《数学分析》《数学物理方程》《分析续论》</p>
<p>研究方向：</p>	<ol style="list-style-type: none"> <li>1. 有限元方法及其应用</li> <li>2. Navier-Stokes 方程理论和数值方法</li> <li>3. 变分不等问题的数值解法</li> </ol>
<p>人才工程：</p>	<ol style="list-style-type: none"> <li>1. 浙江省高校优秀青年教师资助计划，2009年</li> <li>2. 温州市“551人才工程”第三层次，2010年</li> <li>3. 温州市“551人才工程”第二层次，2012年</li> <li>4. 浙江省高校中青年学科带头人培养人选，2013年</li> </ol>
<p>课题项目：</p>	<ol style="list-style-type: none"> <li>1. 国家自然科学基金青年基金项目 (No. 10901122)，2010.01—2012.12，主持</li> <li>2. 浙江省自然科学基金一般项目 (No. LY16A010017)，2016.01—2018.12，主持</li> <li>3. 浙江省自然科学基金一般项目 (No. LY12A01015)，2012.01—2013.12，主持</li> <li>4. 浙江省高校优秀青年教师资助计划项目，主持</li> <li>5. 温州市551人才工程配套经费，主持</li> <li>6. 《数学物理方程》教学改革与探索，温州大学教改一般项目，主持</li> <li>7. 《有限元方法》的教学改革，温州大学研究生教改项目，排名：第二</li> </ol>

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### 论文清单

- [1] Rong An, Yuan Li, Kaitai Li. Finite element approximation for fourth-order nonlinear problem in the plane. *Applied Mathematics and Computation*, 194:1(2007), pp.143-155.
- [2] Yuan Li, Rong An, Kaitai Li. Some optimal error estimates of biharmonic problem using conforming finite element. *Applied Mathematics and Computation*, 194:2(2007), pp.298-308.
- [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)*, 41:10(2007), pp.1245-1247.
- [4] Rong An, Kaitai Li. Variational inequality for the rotating Navier-Stokes equations with subdifferential boundary conditions. *Computers and Mathematics with Applications*, 55:3(2008), pp.581-587.
- [5] Kaitai Li, Rong An. On the rotating Navier-Stokes equations with mixed boundary conditions. *Acta Mathematica Sinica-English Series*, 24:4 (2008), pp.577-598.
- [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*. 33:6(2009), pp.2897-2906.
- [7] Rong An, Yuan Li, Kaitai Li. Solvability of Navier-Stokes Equations with Leak Boundary Conditions. *Acta Mathematicae Applicatae Sinica, English Series*, 25:2(2009), pp.225-234.
- [8] Rong An. Discontinuous Galerkin Finite Element Method for the Fourth-Order Obstacle Problem. *Applied Mathematics and Computation*, 209:2(2009), pp.351-355.

- [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, 30:1(2009), pp.1-12.
- [10] 安荣, 李开泰. 混合边界条件下非齐次定常 Navier-Stokes 方程弱解的存在性, 应用数学学报, 32:4(2009), pp.664-672.
- [11] 安荣, 李开泰. 四阶障碍问题的稳定化混合有限元方法. 应用数学学报, 32:6(2009), pp.1068-1078.
- [12] 安荣, 李媛, 李开泰. 混合边界条件下定常 Navier-Stokes 方程解的正则性. 应用数学, 22:1(2009), pp.83-89.
- [13] Rong An, Kaitai Li. The boundary integral method for the steady rotating Navier-Stokes equations in exterior domain (I): the existence of solution, *Nonlinear Differ. Equ. Appl.*, 17:1(2010), pp.95-108
- [14] Rong An, Kaitai Li. The boundary integral method for the linearized rotating Navier-Stokes equations in exterior domain. *Applied Mathematics and Computation*, 216:9(2010), pp.2671-2678.
- [15] 安荣, 李开泰. Plate Contact 问题的混合有限元逼近. 数学物理学报, 30:3(2010), pp.666-676.
- [16] 安荣, 李开泰, 李媛. 四阶拟线性椭圆方程的有限元误差估计. 工程数学学报, 27:3(2010), pp.527-533.
- [17] Rong An, Yuan Li, Kaitai Li. Fundamental Solution of Rotating Generalized Stokes Problem in  $R^3$ . *Acta Mathematicae Applicatae Sinica, English Series*, 27:4(2011), pp.761-768.
- [18] Yuan Li, Rong An. Two-Level Pressure Projection Finite Element Methods for Navier-Stokes Equations with Nonlinear Slip Boundary Conditions. *Applied Numerical Mathematics*, 61:3(2011), pp.285-297.
- [19] Yuan Li, Rong An. Semi-discrete Stabilized Finite Element Methods for Navier-Stokes Equations with Nonlinear Slip Boundary Conditions Based on Regularization Procedure, *Numer. Math.*, 117:1(2011), pp.1-36.
- [20] Rong An, Kaitai Li. Approximation for Navier-Stokes equations around a rotating obstacle. *Applied Mathematics Letters*, 25:2(2012),

pp.209-214.

[21] Yuan Li, Rong An. Penalty Finite Element Method for Navier-Stokes Equations with Nonlinear Slip Boundary Conditions. *International Journal for Numerical Methods in Fluids*, 69:3(2012), pp.550-566.

[22] Rong An, Hailong Qiu. Two-Level Newton iteration methods for Navier-Stokes type variational inequality problem. *Advances in Applied Mathematics and Mechanics*, 2013, 5:1(2013), pp.36-54.

[23] Rong An, Yuan Li. Augmented Lagrange iteration method for fourth-order obstacle problem with gradient restriction (in Chinese). *Mathematica Numerica Sinica*, 35:1(2013), pp.11-20

[24] Rong An, Xuehai Huang. Constrained C0 Finite element methods for biharmonic problem. *Abstract and Applied Analysis*, vol. 2012, Article ID 863125, 19pages, 2012.

[25] Yuan Li, Rong An. Two-Level Iteration Penalty Methods for Navier-Stokes Equations with Friction Boundary Conditions. *Abstract and Applied Analysis*, Volume 2013, Article ID 125139, 17 pages

[26] Rong An, Yuan Li. two-level penalty finite element methods for Navier-Stokes equations with nonlinear slip boundary conditions, *International Journal of Numerical Analysis and Modeling*, 2014, 11:3(2014), pp.608-624.

[27] Rong An, Comparisons of Stokes/Oseen/Newton iteration methods for Navier–Stokes equations with friction boundary conditions, *Appl. Math. Modell.*, 38:23(2014), pp.5535-5544.

[28] Rong An, Xian Wang, Two-Level Brezzi-Pitkäranta Discretization Method Based on Newton Iteration for Navier-Stokes Equations with Friction Boundary Conditions, *Abstract and Applied Analysis*, Volume 2014, Article ID 474160, 14 pages

[29] Rong An, Xian Wang, Two-Level Brezzi-Pitkäranta Stabilized Finite Element Methods for the Incompressible Flows, *Abstract and Applied Analysis*, Volume 2014, Article ID 698354, 14 pages

- [30] Rong An, Xian Wang, Discontinuous Galerkin finite element method for Plate contact problem with frictional boundary conditions, *Journal of Numerical Mathematics*, 22:3(2014), pp.177-190
- [31] Rong An, Feng Shi, Two-Level Iteration Penalty Methods for the Incompressible Flows, *Appl. Math. Modell.*, 39:2(2015), pp. 630-641.
- [32] Rong An, Xuehai Huang. A compact  $C0$  discontinuous Galerkin method for Kirchhoff plates. *Numerical Methods for Partial Differential Equations*, 31:4(2015), pp.1265-1287.
- [33] Yuan Li, Rong An, Two-level variational multiscale finite element methods for Navier–Stokes type variational inequality problem, *Journal of Computational and Applied Mathematics*, 290(2015), pp.656-669.
- [34] Rong An. Optimal Error Estimates of Linearized Crank–Nicolson Galerkin Method for Landau–Lifshitz Equation, *Journal of Scientific Computing*, 69:1(2016), pp.1-27.
- [35] An Liu, Yuan Li, Rong An, Two-level defect-correction method for steady Navier-Stokes problem with friction boundary, *Advances in Applied Mathematics and Mechanics*, 8:6 (2016), pp.932-952.
- [36] Caidi Zhao, Guowei Liu, Rong An. Global well-posedness and Pullback attractors for an incompressible non-Newtonian fluid with infinite delays. *Differential Equations and Dynamical Systems*, 25:1(2017), pp.39-64.
- [37] Yuqing Zhang, Yuan Li, Rong An. Two-Level Iteration Penalty and Variational Multiscale Method for Steady Incompressible Flows, *Journal of Applied Analysis and Computation*, 6:3(2016), pp.607-627.
- [38] Rong An, Yuan Li, Yuqing Zhang. Error Estimates of Two-Level Finite Element Method for Smagorinsky Model, *Applied Mathematics and Computation*, 274 (2016), pp.786-800.
- [39] Rong An, Kaitai Li. Accuracy Analysis of the Boundary Integral Method for Steady Navier-Stokes Equations around a Rotating Obstacle. *Acta Mathematicae Applicatae Sinica, English Series*, 32:2 (2016),

pp.529-536.

[40] Rong An, Can Zhou. Error analysis of a fractional-step method for magnetohydrodynamics equations. *Journal of Computational and Applied Mathematics*, 313(2017), pp.168-184.

[41] Rong An, Yuan Li. Error analysis of first-order projection method for time-dependent magnetohydrodynamics equations. *Applied Numerical Mathematics*, 112(2017), pp.167-181.

[42] Rong An, Jian Su. Optimal error estimates of semi-implicit Galerkin method for time-dependent nematic liquid crystal flows, accepted for publication in *Journal of Scientific Computing*, 2017.

[43] Hailong Qiu, Rong An, Liquan Mei, Changfeng Xue. Two-step algorithms for the stationary incompressible Navier-Stokes equations with friction boundary conditions. *Applied Numerical Mathematics*, 120(2017), pp.97-114.