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**教育背景:**

1988-1992: 博士研究生，北京大学数学科学学院

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1984-1988: 学士，北京大学数学系

**工作经历:**

2015- 副教务长，学科建设办公室主任，北京大学

2010- 主任，“数学及其应用”教育部重点实验室

2001-: 常务副主任，北京大学科学与工程计算中心

2013-2015 常务副院长，北京大学数学科学学院

2008‐2012  副院长，北京大学数学科学学院

2008-2012 副所长，北京大学数学研究所

2008‐2010  副主任，“数学及其应用”教育部重点实验室

1999‐2008  系主任，北京大学数学科学学院科学与工程计算系

1996‐  教授，北京大学数学科学学院

1994 ‐ 1996  副教授，北京大学数学科学学院

1992-1994: 讲师，北京大学数学科学学院

**研究领域:**

软物质(复杂流体)的建模和计算

应用分析和数值分析

移动网格方法及其应用

**所获荣誉与奖励:**

2015  中国科学院院士

2014  国家自然科学奖二等奖

2014  国家自然科学基金委员会创新研究群体带头人

2010  北京市师德标兵

2007  教育部高校科学技术奖自然科学一等奖

2002  长江学者

2002  国家教育部全国普通高等院校优秀教材二等奖

2002  国家杰出青年基金

2002  北京市第十六届“五四青年奖章”

2000  教育部首届高等学校优秀青年教师教学科研奖励计划‘青年教师奖’

1999  霍英东教育基金会第七届高等院校青年教师奖（研究类）一等奖

1999  冯康科学计算奖

1995  与应隆安合著“涡度法”获全国优秀科技图书二等奖

1994  北京计算数学学会优秀论文奖

1992  光华奖学金

1990  九章数学奖学金

**学术兼职:**

2016 ‐ 理事长，学术委员会主任，中国工业与应用数学学会(CSIAM)

2015- 学术委员会副主任，“大规模科学与工程计算”国家重点实验室

2006 ‐   学术委员会副主任，北京应用物理与计算数学研究所计算物理实验室

2001 ‐ 2006  学术委员会副主任，“大规模科学与工程计算”国家重点实验室

2010 ‐ 2014  副理事长，中国计算数学学会

2002 ‐ 2006  副理事长，中国计算数学学会

2005 ‐   兼职教授，吉林大学

2004 ‐   兼职教授，湘潭大学

2004 ‐  兼职教授，苏州大学

1999 ‐ 2001  兼职教授，清华大学

**学术交流:**

2004.03-05 访问学者，普林斯顿大学应用和计算数学系，美国

2002.01-02 访问学者，普林斯顿大学应用和计算数学系，美国

2001.01-02 访问学者，香港科技大学数学系

1999.07-08 访问学者，加州理工大学应用数学系，美国

1999.05 访问学者，香港浸会大学数学系

1998.09-1999.02 访问学者，香港浸会大学数学系

1997.11-1998.08 访问学者，加州理工大学应用数学系，美国

1996.04 访问学者，香港中文大学数学系

1995.02-11 访问学者，加州理工大学应用数学系，美国

1993-1996: 访问副教授, 计算物理国家实验室，中国

**杂志编委:**

2014- Multiscale Modeling & Simulation, A SIAM Interdisciplinary Journal

2012- Discrete and Continuous Dynamical System - B;

2011- Journal of Mathematics in Industry (Coordinating Editors);

2010- Applied Mathematics and Mechanics;(Associate Chief Editor Since 2014)

2007- Journal of Computational Mathematics;

2006- Communications in Computational Physics;

2006- International Journal of Nonlinear Science;

2005- Communication in Mathematical Sciences;

2005- Journal of Information and Computational Science;

2005-2013 SIAM Journal on Numerical Analysis;

2002- Applied Mathematical Research Express (AMRX);

2010- Advances in Mathematics (China);

2007-  《工程数学学报》

2006-  《数学杂志》

2004-  《计算数学》

2004-  《计算物理》

2004-  《东北数学》

**主办会议:**

* The 8th International Congress on Industrial and Applied Mathematics (ICIAM 2015), 学术子委员会主席, 北京, 2015.8.10-14.
* Frontiers of Applied and Computational Mathematics, 北京, 2015.8.7-9.
* Workshop of Mathematical Analysis, Modeling and Computations on Liquid Crystals and Related Topics, 北京，2015.8.8-9.
* One-Day Workshop on Mathematical Theory of Liquid Crystals, 北京, 2014.9.29.
* Northeastern Asian Symposium on Methods and Modeling for High Performance Scientiﬁc Computing, 2013.9.22-25.
* Modeling and Mathematical Theory of Phase Transition, 北京大学, 2011.12.31.
* The First Cross-straits Workshop on Computational Mathematics, 厦门, 2010.8.3-6.
* Computational Problems in Material Sciences, 苏州，2010.8.2-4.
* Workshop on Numerical Methods of PDEs, 广州, 2010.7.28-31.
* The 7th International Conference on Scientiﬁc and Applications, 大连, 2010.6.13-16.
* China-Germany Conference on “Mathematics and Industry”, 北京, 2010.3.15-17.
* The 5th China-Italy Conference on Computational and Applied Mathematics, Mathematical models in Life Science: Theory and Simulation, 意大利，罗马，2009.11.
* International Workshop on Quantum Systems and Semiconductor Devices: Analysis, Simulations, Applications, 北京，2009.04.
* Rheology of complex ﬂuids: Modeling and Numerics, 法国，巴黎，2009.01.
* Multiscale Modeling of Complex Fluids专题活动, 北京大学，2007.09-2008.05
* Multiscale Modeling of Complex Fluids, University of Maryland, 2007.04
* Mathematical and numerical modeling of nanoscale devices暑期学校, 北京大学，2005.06-07.
* Adaptive method and applications暑期学校, 北京大学，2005.06-08.
* Scientiﬁc Computing and Applied Mathematics暑期学校, 北京大学2005.06-08.
* International conference on multiscale modeling and scientiﬁc computing, 北京大学, 2005.06.
* Mathematical models in life sciences: Theory and Simulation, 北京大学, Jun. 2005.
* Summer School of Scientiﬁc Computing and Applied Mathematics, 北京大学, Jul.-Aug. 2003.
* Summer School of Scientiﬁc Computing and Applied Mathematics, 北京大学, Aug.-Sept. 2003.
* The Second Chinese-Korean Joint Workshop on Recent Advances in Numerical Analysis and Its applications, 北京，2003.02.
* Summer School of Scientiﬁc Computing and Applied Mathematics, 清华大学, 2002.07-08
* The 10th conference on Computational Methods of Fluid Mechanics (会议主席), 云南昆明，2001.08.
* International symposium on computational & applied PDEs, 张家界，2001.06.
* International conference on scientiﬁc & engineering computing (会议主席), 北京大学, 2001.03.
* Workshop on Numerical PDE, 北京大学，1996.
* Overseas Chinese Computational Physics Conference, 北京, 1996.
* The 6th conference on Computational Methods of Fluid Mechanics (会议秘书)，山东大学，1993.

**邀请报告:**

* The 9th International Conference on Computational Physics, 新加坡, 2015.1.7-11.
* International Conference on Optimization, Sparsity and Adaptive Data Analysis, 北京，2015.3.18-21.
* The 2014 SIAM Annual Meeting (AN14), Chicago, Illinois, USA, 2014.7.7-11.
* Robust Discretization and Faster Solvers for Computable Multi-Physics Models, ICERM, Brown University, 2014.5.12-16.
* The 5th International Conference on Scientiﬁc Computing and PDEs, 香港，2014.12.8-12.
* International Conference on PDE, 广州, 2013.12.6-10.
* 2013 Northeastern Asian Symposium on Methods and Modeling for High Performance Scientiﬁc Computing,成都, 2013.9.22-25.
* 2013 International Conference on Mathematical Modeling and Computation, 武汉，2013.5.15-19.
* Nonlinear analysis of continuum theories: statics and dynamics, Oxford, 2013.4.8-12。
* Symmetry, bifurcation and order parameters, Cambridge，2013.1.7-11
* Multiscale Modeling, Simulation, Analysis and applications, 新加坡, 2012.1.9-13.
* International Conference on Scientiﬁc Computing, 香港, 2012.1.4-7.
* 7𝑡ℎ International Congress on Industrial and Applied Mathematics, Vancouver, 2011.7.18-22.
* International Conference on Interdisciplinary Applied Mathematics and Computational Mathematics, 浙江，2011.6.17-21.
* Sino-French Workshop on Contemporary Applied Mathematics, 上海，2011.7.4-8.
* International Conference on Applied Mathematics and Interdisciplinary Research, 天津, 2011.6.13-16.
* Kinetic and Fluids, 北京，2010.07.
* The 5th China-Italy Conference on Computational and Applied Mathematics. Mathematical models in Life Science: Theory and Simulation, Roma, Italy, 2009.09
* The 3rd Chinese-German Workshop on Computational and Applied Mathematics, Heidelberg, Germany, 2009.9.28 – 10.2.
* International Workshop on Continuum Modeling of Biomolecules, 北京, 2009.09
* Mathematical Theory and Numerical Methods of Computational Materials simulation and Design, 新加坡，2009.08.
* International Conference on Mathematical Theory and Applications of Liquid Crystal, Ferromagnetism and Related Topics, 广州，2009.06.
* Computational Multiscale Methods, Oberwolfach, Germany, 2009.06.
* International Workshop on Quantum Systems and Semiconductor Devices: Analysis, Simulations, Applications, 北京, 2009.04.
* Adaptivity, Robustness and Complexity of Multiscale Algorithm, Edinburgh, England, 2009.03.
* Rheology of complex ﬂuids: Modeling and Numerics, 法国，巴黎，2009.01.
* The 6th International Conference on Scientiﬁc Computing and Applications, Busan, Korea, 2008.06.
* Workshop on the Foundations of numerical PDEs (FoCM), 香港，2008.06.
* Workshop on Nanoscale Interfacial Phenomena in Complex Fluids, 北京，2008.06.
* Canada-China workshop on industrial mathematics, Banﬀ, Canada, 2007.08.
* Multiscale Modeling of Complex Fluids, Maryland, 2007.04.
* International Workshop on Multiscale Analysis and Applications, 新加坡，2006.11.
* The Symposium on Multi-physics and Muti-Scale Computation of Materials-2006, 西安， 2006.11.
* International Conference on PDE and Numerical Analysis, 长沙，2006.06.
* Workshop on Multiscale Modeling of Complex Fluids, 北京, Jun. 2006.06.
* International Conference on Recent Advances in Scientiﬁc Computations, 北京，2006.06.
* International Conferences on Applied Mathematics and Interdisciplinary Research, 天津，2006.06.
* International Symposium on Polymer Physics, 苏州, 2006.06.
* Interfacial Dynamics in Complex Fluids, Banﬀ, 加拿大，2006.05.
* International Conference on Calculus of Variations, PDEs and Nonlinear Analysis, 北京，2006.05.
* The second International Conference on Scientiﬁc Computing and Partial Diﬀerential Equations,香港, 2005.11.
* The 1st China-Germany Workshop on Computational and Applied Mathematics, Berlin, Germany, 2005.09.
* International conference on scientiﬁc computing, 南京，2005.06.
* International conference on multiscale modeling and scientiﬁc computing, 北京大学，2005.06.
* Mathematical models in life sciences: Theory and Simulation, 北京，2005.06.
* The 3rd joint Chinese-Korean Workshop on Recent Progresses on Numerical Analysis and Its Applications, South Korea, 2005.02.
* Nanoscale Material Interfaces: Experiment, Theory and Simulation，新加坡，2005.01。
* Workshop on Multiscale Rheological Models for Fluids, Montreal, 加拿大，2004.11.
* International Conference on Numerical and Applied PDEs，长春，2004.06.
* International Conference on Frontiers of Applied Mathematics, 北京，2004.06.
* The 2nd International Conference on Inverse Problem, 上海，2004.06.
* International Workshop on Wave Propagations, 北京，2004.06.
* International Conference on Superconvergence and A Posteriori Estimates in FEM, 长沙，2004.05.
* International Conference of Scientiﬁc Computing, 北京，2003.12.
* The 3rd China-Italy Joint Conference on Computational and Applied Mathematics, Grado, Italy, 2003.11.
* The 2nd Chinese-Korean Joint Workshop on Recent Advances in Numerical Analysis and Its applications, 北京，2003.02.
* The Third International Workshop on Scientiﬁc Computing and Applications, 香港，2003.01.
* ICM2002-Beijing Satelite Conference on Scientiﬁc Computing, 西安，2002.08.
* The 11th International Conference of Fluid Dynamics and Soft Condensed Matter, 上海， 2002.08.
* Workshop on Multiscale Analysis and Computation, 台湾, 2002.06.
* The 3rd China-Sweden Workshop on Computational Mathematics Goteberg, 瑞典，2002.06.
* International symposium on computational & applied PDEs, 张家界，2001.06.
* International conference on scientiﬁc & engineering computing, 北京大学, 2001.03.
* The First Chinese-Korean Joint Workshop on Recent advances in Numerical Analysis and Its Applications, 韩国，2001.02.
* The 2nd Sino-Italian Symposium on Computational and Applied Mathematics, Ischia, Italy, 2000.06.
* The 2nd China-Sweden workshop on Numerical Partial Diﬀerential Equations, 香港，2000.01.
* Conference of Partial Diﬀerential Equation and Numerical Method in Mechanics, 香港，1999.06.
* The First Sino-Italian Symposium on Applied and Computational Mathematics, 北京，1998.12.
* China-Japan Symposium on Computational Mathematics, 大连，1997.08.
* 96’Symposium on Computational Physics, Institute of Computational Mathematics and Applied Physics, 北京，1996.06.
* Summer Research Seminars on Theory and Computations of Fluid Dynamics, 北京，1994.06.

**期刊论文:**

1. Pingwen Zhang, Viscous splitting for the exterior problem of Navier-Stokes equations, Acta Scientiarum Naturalium Universitatis Pekinensis, Vol 27, No. 3, (1991).

2. Pingwen Zhang, Viscosity splitting with nonzero tangent boundary value, Numerical Mathematics, Journal of Chinese Universities, Vol 14, No. 2, (1992).

3. Pingwen Zhang, Exterior problem for the three-Dimensional Euler equation, Journal of Partial Diﬀerential Equations, Vol 5, No. 3, (1992).

4. Pingwen Zhang, A sharp estimate of simpliﬁed viscosity splitting scheme, Journal of Computational Mathematics, Vol 11, No. 3, 295-210, (1993).

5. Pingwen Zhang, A family of viscous splitting schemes for Navier-Stokes equations, Journal of Computational Mathematics, Vol. 11, No. 1, 20-36, (1993).

6. Pingwen Zhang, A symmetrical viscous splitting schemes for Navier-Stokes equations, Numerical Mathematics, A Journal of Chinese Universities, Vol 1, No. 1, (1993).

7. Long-an Ying and Pingwen Zhang, Fully discrete convergence estimates for vortex methods in bounded domains, SIAM Journal on Numerical Analysis, Vol 31, No. 2, 344-361,

(1994).

8. Pingwen Zhang, Convergence of vortex methods for Exterior problems, Chinese Annal of Mathematics, 15A (3) 287-296, (1994) (in Chinese).

9. Pingwen Zhang, On vortex methods for initial boundary problems, Northeast Mathematical Journal, Vol. 10, No. 2, 256-266, (1994).

10. Zhenhuan Teng, Long-an Ying and Pingwen Zhang, Convergence of variable-elliptic-vortex method for Euler equations, SIAM Journal on Numerical Analysis, Vol 32 No. 3, 754-774, (1995).

11. Pingwen Zhang, Huaqi Liu and Yu Zhang, Computation of wavelet function, Mathematica Numerica Sinica (Chinese) , Vol 2, 173-185, (1995)

12. Pingwen Zhang, Convergence of the point vortex methods for Euler equation on half plane, Journal of Computational Mathematics, Vol. 14, No. 3, 213-222, (1996).

13. Thomas Y. Hou, Zhenhuan Teng and Pingwen Zhang, Well-posedness for linearizied motion of 3-D water waves far from equilibrium, Communications in Partial Diﬀerential Equations, 21 (9&10), 1551-1585, (1996).

14. Pingwen Zhang, Convergence of vortex Methods in a bounded domain Using linear ﬁnite elements, IMA Journal of Numerical Analysis, 16, 539-548, (1996).

15. Pingwen Zhang, Convergence of vortex with boundary element methods, Journal of Computational Mathematics 15:(2) 127-137 (1997).

16. Zhenhuan Teng and Pingwen Zhang, Optimal L1-Rate of Convergence for Viscosity Method and Monotone Scheme to Piecewise Constant Solution with Shocks, SIAM Journal on Numerical Analysis, Vol. 34, 3, (1997).

17. Thomas Y. Hou and Pingwen Zhang, Growth Rates for the Linearized Motion of 3-D Fluid Interfaces with Surface Tension Far from Equilibrium, The Asian Journal of Mathematics, Vol. 2, 2, (1998).

18. Long-an Ying and Pingwen Zhang, Vanishing Curvature Viscosity for Front propagation, Journal of Diﬀ. Eqs. 161, 289-306 (2000).

19. Pingwen Zhang and Yu Zhang, Wavelet Boundary Element Methods, J. Comput. Math. Vol.18, No.1 25-42 (2000).

20. Tao Tang, Weimin Xue and Pingwen Zhang, Analysis of Moving Mesh Methods Based on Geometrical Variables, J. Comp. Math. Vol. 19, No.1, 41-54 (2001).

21. Thomas Y. Hou and Pingwen Zhang, A New Stability Technique for Boundary Integral Methods of Water Waves, Math. Comp. Vol. 70 No. 235, 951-976 (2001).

22. B. Fu, Z. Yang, Y. Wang and P. Zhang, A Mathematical Model of Soil Moisture Spatial Distribution on the Hill Slopes of the Loess Plateau, Science in China (series D) Vol. 44 No. 5 395-402 (2001).

23. Rou Li, Tao Tang and Pingwen Zhang, Moving Mesh Methods in Multiple Dimensions Based on Harmonic Maps, Journal of Computational Physics 170, 562-588 (2001).

24. Tiejun Li and Pingwen Zhang, Numerical Studies of Shollow Water Waves on Slopping Beach with Artiﬁcial Boundary, Mathematica Numerica Sinica (Chinese) Vol.23, No.4, 503-512 (2001).

25. Qiang Du, Dianzhong Li, Yiyi Li, Rou Li and Pingwen Zhang, Simulating A Double Casting Technique Using Level Set Method, Computational Materials Science 22, 200-212 (2001).

26. Pingwen Zhang and Xiaoming Zheng, Numerical Studies of 2D Free Surface Waves with Fixed Bottom, Journal of Computational Mathematics Vol.20, No.4, 391-412 (2002).

27. Thomas Y. Hou and Pingwen Zhang, Convergence of a Boundary Integral Method for 3-D Water Waves, Discrete and Continuous Dynamical Systems Series B Vol. 2, Number 1, 1-34 (2002).

28. Rou Li, Tao Tang and Pingwen Zhang, A Moving Mesh Finite Element Algorithm for Singular Problems for Two and Three Space Dimensions, Journal Computational Physics, 177, 365-393 (2002).

29. Zhenfu Xu and Pingwen Zhang, Stability of Boundary Integral Method for Water Wave, Mathematica Numerica Sinica (Chinese) Vol.24, No.3, 311-318 (2002).

30. Q. Wang, W. E, C. Liu and P. Zhang, Kinetic Theories for Flows of Nonhomogeneous Rodlike Liquid Crystalline Polymers with a Nonlocal Intermolecular Potential, Physical Review E Vol. 65, 051504 (2002).

31. Weinan E, Tiejun Li and Pingwen Zhang, Convergence of a stochastic method for the modeling of polymeric ﬂuids, Acta Mathematicae Applicatae Sinica, English Series, Vol. 18 529-536 (2002).

32. Thomas Y. Hou, Gang Hu and Pingwen Zhang, Singularity Formulation of 3D Vortex Sheets, Physics of Fluids Vol. 15, No. 1, 147-172 (2003).

33. Pingwen Zhang, Yi Sun, Haiyan Jiang and Wei Yao, Multi-scale Methods for Inverse Modeling in 1-D Mos Capacitor, Journal of Computational Mathematics, Vol. 21, No. 1, 85-100, (2003).

34. Huazhong Tang, Tao Tang and Pingwen Zhang, An adaptive mesh redistribution method for nonlinear hamiltonian-jacobi equations in two- and three dimensions, Journal of Computational Physics, Vol 188/2 543 - 572, (2003)

35. Xiao yingxion,Shu shi, Pingwen Zhang, A kind of semi-roarsing AMG method for two dimensional energy equations with three temperatures, Numerical Computation and Application of Computer, Vol. 4, 293-303, (2003)

36. Hui Zhang and Pingwen Zhang, A theoretical and numerical study for the rod-like model of a polymeric ﬂuid, Journal of Computational Mathematics, Vol. 22 No. 2, 319-330, (2004)

37. Daming Li, Ruo Li and Pingwen Zhang, A new coupled model for alloy solidiﬁcation Science in China series A-Mathematics, 47: 41-52 Suppl. S APR, (2004)

38. Wienan E, Tiejun Li and Pingwen Zhang, Well-posedness for the dumbbell model of polymeric ﬂuids, Communications in mathematical physics 248 (2): 409-427, (2004)

39. Tiejun Li, Hui Zhang and Pingwen Zhang, Local existence for the dumbbell model of polymeric ﬂuids, Communications in Partial Diﬀerential Equations 29 (5-6): 903-923, (2004)

40. Tiejun Li, Eric Vanden-Eijnden, Pingwen Zhang and Weinan E, Stochastic models of polymeric liquids at small Deborah number, Journal of Non-Newtonian Fluid Mechanics, 121, 117-125, (2004)

41. Tiejun Li, Pingwen Zhang and Xiang Zhou, Analysis of 1+1 dimensional stochastic models of liquid crystal polymer ﬂows, Communications in Mathematical Sciences 2295-316, (2004)

42. Tiao Lu, Pingwen Zhang and Wei Cai, Discontinuous Galerkin methods for dispersive and lossy Maxwell’s equations and PML boundary conditions, Journal of Computational Physics 200 (2): 549-580, (2004)

43. Chong Luo, Hui Zhang and Pingwen Zhang, The structure of equilibrium solutions of one-dimensional Doi equation, Nonlinearity, 18, 379-389, (2005)

44. Tiao Lu, Wei Cai and Pingwen Zhang, Conservative local discontinuous Galerkin methods for time dependent Schrodinger equation, International Journal of Numerical Analysis & Modeling Vol. 2(1)75-84 (2005)

45. Weinan E Pingbing Ming and Pingwen Zhang, Analysis of the heterogeneous multiscale method for elliptic homogenization problems, Journal of the American Mathematical Society 18 (1): 121-156, (2005)

46. Tiao Lu, Wei Cai and Pingwen Zhang, Discontinuous Galerkin time-domain method for GPR simulation in dispersive media, IEEE Transactions on Geoscience and Remote Sensing 43 (1): 72-80, (2005)

47. Yana Di, Ruo Li, Tao Tang and Pingwen Zhang, Moving mesh ﬁnite element methods for the incompressible Navier-Stokes equations, SIAM Journal on Scientiﬁc Computing 26 (3): 1036-1056, (2005)

48. Hailiang Liu, Hui Zhang and Pingwen Zhang, Axial symmetry and classiﬁcation of stationary solutions of Doi-Onsager equation on the sphere with Maier-Saupe potential, Communications in Mathematical Sciences,3 201-218, (2005)

49. Xia Ji, Tiao Lu T, Wei Cai and PingwenZhang, Discontinuous Galerkin time domain (DGTD) methods for the study of 2-D waveguide-coupled microring resonators, Journal of Lightwave Technology 23 (11): 3864-3874 (2005)

50. Haiyang Jiang and Pingwen Zhang, Model analysis and parameter extraction for MOS capacitor including quantum mechanical eﬀects, Journal of Computational Mathematics 24 (3): 401-411 MAY (2006)

51. Tiejun Lin and Pingwen Zhang, Convergence analysis of BCF method for Hookean dumbbell model with ﬁnite diﬀerence scheme, Multiscale Modeling & Simulation 5 (1):205-234 (2006)

52. Hui Zhang and Pingwen Zhang, Local existence for the FENE-dumbbell model of polymeric ﬂuids Archive for Rational Mechanics and Analysis 181 (2): 373-400 JUL (2006)

53. Dongzhuo Zhou, Pingwen Zhang and Weinan E, Modiﬁed models of polymer phase separation Physical Review E 73 (6): Art. No. 061801 Part 1 JUN (2006)

54. Yana Di and Pingwen Zhang, Moving mesh kinetic simulation for sheared rodlike polymers with high potential intensities. Communications in Computational Physics, 1 859-873. (2006)

55. Yana Di, Ruo Li, Tao Tang, and Pingwen Zhang, Moving mesh methods for singular problems on a sphere using perturbed harmonic mappings, SIAM Journal on Scientiﬁc Computing, 28, 1490-1508. (2006)

56. Guanghua Ji, Qi Wang, Pingwen Zhang and Hong Zhou, Study of phase transition in homogeneous, rigid extended nematics and magnetic suspensions using an order-reduction method, Physics of Fluids, 18, 123103 (2006)

57. Weinan E and Pingwen Zhang, A Molecular Kinetic Theory of Inhomogeneous Liquid Crystal Flow and the Small Deborah Number Limit, Methods and Applications of Analysis Vol. 13, No. 2, 181-198, JUN (2006)

58. Pingbing Ming and Pingwen Zhang, Analysis of the heterogeneous multiscale method for parabolic homogenization problems, Mathematics of Computation 76 (257): 153-177 (2007)

59. Xia Ji, Wei Cai and Pingwen Zhang, High order DGTD methods for dispersive Maxwell’s equations and modeling of silver nanowire Coupling, International Journal for Numerical Methods in Engineering 69, 308-325 (2007)

60. Haijun Yu and Pingwen Zhang, A kinetic-hydrodynamic simulation of microstructure of liquid crystal polymers in plane shear ﬂow, Journal of Non-Newtonian Fluid Mechanics 141 (2-3): 116-127 FEB 15 (2007)

61. Daming Li, Ruo Li and Pingwen Zhang, A cellular automaton technique for modelling of a binary dendritic growth with convection, Applied Mathematical Modelling 31 (6):971-982 JUN (2007)

62. Tiejun Li and Pingwen Zhang, Mathematical analysis of multi-scale models of complex ﬂuids, Communications in Mathematical Sciences 5 (1): 1-51 MAR (2007)

63. Yana Di, Ruo Li, Tao Tang and Pingwen Zhang, Level set calculations for incompressible

two-phase ﬂows on a dynamically adaptive grid, Journal of Scientiﬁc Computing 31 (1-2): 75-98 MAY (2007)

64. Dan Hu, Pingwen Zhang and Weinan E, Continuum theory of a moving membrane, Physical Review E 75 (4): Art. No. 041605 Part 1 APR (2007)

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