# RESUME

Name: Xingye YUE, 岳兴业

Gender: Male

### **Current Occupation:**

Professor, School of Mathematical Sciences and Mathematical Center for Interdiscipline Research, Soochow University, Suzhou, Jiangsu 215006 China

#### **Research Interests:**

Multi-scale modeling and simulation on porous media and composite; Computational Finance; Numerical Methods for G-expectation.

### **Education:**

Sept. 1984 – June 1988	BS, Soochow University
	Major: Mathematical Education
Sept. 1988 – June 1991	MS, Soochow University
	Major: Applied Mathematics
Sept. 1995 – June 1998	PhD, Soochow University
	Major: Applied Mathematics
	Supervisor: Professor Lishang Jiang

## Working Experience:

July 2009	 Present	Professor
v		Dept. of Math., Soochow University
July 2006	 July 2009	Professor
v	v	Dept. of Math., Univ of Sci and Tech of China
Apr. 2005	 June 2006	Professor
-		Dept. of Math., Soochow University
July 1999	 Mar. 2005	Associate Professor
v		Dept. of Math., Soochow University
July 2000	 July 2002	Post-doc Fellow
, and the second	, and the second	Institute of Computational Mathematics,
		Chinese Academy of Sciences
June 1993	 June 1999	Lecturer
		Dept. of Math., Soochow University
Sep. 1991	 May 1993	Teaching Assistant
-	v	Dept. of Math., Soochow University

### **Visiting Positions:**

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Jul. 2014
                 Aug. 2014
                             Visiting Schoolar, PSU
Apr. 2013
                 Apr. 2013
                             Visiting Research Member, Princeton U
Mar. 2013
                 Mar. 2013
                             Visiting Schoolar, PSU
                             Senior Research Fellow, NUS
July 2012
                 Aug. 2012
Aug. 2007
                  Oct. 2007
                             Research Fellow, NUS
Feb. 2005
                  Apr. 2005
                             Visiting Research Member, Princeton U
Oct. 2003
                  Dec. 2003
                             Visiting Research Member, Princeton U
Sep. 2002
                  Jan. 2003
                             Visiting Research Member, Princeton U
May 1993
                  July 1994
                             Research Assistant, HKPoly
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#### **Publications:**

- 1. Xingye Yue, Numerical analysis on nonstationary thermistor problem, J. Comput. Math., V.12(3): 213-223 1994.
- Lishang Jiang, Zuhan Liu, Fahuai Yi and Xingye Yue, A PDE problem arising from calculation of the model for continuous casting of steel, Appl. Math.-JCU, 10b, 1-10, 1995.
- 3. Xingye Yue, Finite element analysis for phase field model with non-smooth initial data, Acta Mathematicae Applicatae Sinica, V. 19, 15-24, 1996.
- 4. Xingye Yue, Lishang Jiang and and Tsi-min Shih, Finite element analysis of a local exponentially fitted scheme for time-dependent convection-diffusion problems. J. Comput. Math. V.17(3), 225-232, 1999.
- 5. Zhiming Chen, Tsi-min Shih and Xingye Yue, Numerical Methods for Stefan problems with prescribed convection and nonlinear flux. IMA J. Numer. Math. V.20(1), 81-98, 2000.
- Lishang Jiang and Xingye Yue, Local exponentially fitted FE scheme for singularly convection-diffusion problems. J. Comp. Appl. Math., Vol.132(2), 277-293, 2001.
- 7. Xingye Yue, Local pointwise error estimate of modified method of characteristics, Chinese Annual of Mathematics, V. 23A(1), 79-86, 2002(in Chinese).
- 8. Xingye Yue, Local error estimates for methods of characteristics incorporating with streamline diffusion. Acta Mathematica Scientia, V.22(4), 564-576, 2002.
- 9. Xingye Yue, A note on practical bubbles for advection-diffusion problems. CALCOLO, V.39(4), 189-200, 2002.

- 10. Zhiming Chen and Xingye Yue, Numerical homogenization of well singularities in the flow transport through heterogeneous porous media. SIAM Multiscale Modeling and Simulation, V.1(2), 260-303, 2003.
- 11. Weinan E and Xingye Yue, Heterogeneous multiscale method for locally self-similar problems. Commun. Math. Sci., Vol. 2(1), 137-144, 2004.
- 12. Xingye Yue and Weinan E, Numerical methods for multiscale transport equations and application to two phase porous media flow, J. Comput. Phys., V.210(2), 656-675, 2005.
- 13. Pingbing Ming and Xingye Yue, Numerical methods for multiscale elliptic problems, J. Comput. Phys. V.214(1), 421-445, 2006.
- 14. Xingye Yue and Weinan E, The local microscale problem in the multiscale modeling of strongly heterogeneous media: effect of boundary conditions and cell Size, J. Comput. Phys., V.222(2), 556 572, 2007.
- 15. Meiqun Jiang and Xingye Yue, Numerical homogenization of well singularities in the flow transport through heterogenous porous media: fully discrete scheme, ESAIM: M2AN, V.41, 945 957, 2007.
- 16. Yun Bai, Xingye Yue and Qingfeng Zeng, Multi-scale modeling and numerical simulation for CVI process, Commun. Comput. Phys., V.7(3), 597-612, 2010.
- 17. Tao Yu and Xingye Yue, Residual-free bubble methods for numerical homogenization of elliptic problems, Commun. Math. Sci. V.9(4), 1163-1176, 2011.
- 18. TaoYu and Xingye Yue, Exponentially Fitted Local Discontinuous Galerkin Method for Convection-Diffusion Problem, J. Comput. Math., V.30(3), 298-310, 2012.
- 19. Lei Zhao, Xingye Yue and David Waxman, Complete numerical solution of the diffusion equation of random genetic drift, Genetics, V.194(4), 973-985, 2013.
- 20. Haitao Cao and Xingye Yue, Homogenization of Richards' equation of van Genuchten-Mualem model, J. Math. Anal. Appl., 412, 391-400, 2014.
- Haitao Cao, Tao Yu and Xingye Yue, A completely discrete heterogeneous multiscale finite element method for multiscale Richards' equation of van Genuchten-Mualem model, J. Appl. Math, DOI: 10.1155/2014/657816, 2014.
- 22. Lei Ge, Xiaosong Qian and Xingye Yue, Explicit formulas for pricing creditlinked notes with counterparty risk under reduced-form framework, IMA Journal of Management Mathematics, doi: 10.1093/imaman/dpt028, 2014
- 23. Shixin Xu and Xingye Yue, Homogenization of Thermal-Hydro-Mass transfer processes, DCDS-S, V.8(1), 55-76, DOI: 10.3934/dcdss.2015.8.55, 2015.

- 24. Na Li, Li Ren and Xingye Yue, Application and Validation of an Upscaling Method for Unsaturated Water Flow Processes in Heterogeneous Soils, Vadose Zone Journal, V.14(7), DOI: 10.2136/vzj2014.12.0171, 2015.
- Haitao Cao, Tao Yu and Xingye Yue, Fully discrete IPDG-HMM for multiscale Richards equation of unsaturated flow in porous media, J. Comput. Appl. Math., V. 290, 352-369, DOI: 10.1016/j.cam.2015.05.012, 2015.

### **Research Grants**

- 1. NSFC Grant 10471102: Multiscale modeling and simulation for flow in porous media. (2005 2007)
- 2. NSFC Grant 10871190: Multiscale modeling and simulation for the processes of heat-flow-mass transport in porous media with lower permeability. (2009 2011)
- 3. 973 Project: 2005CB321704 (2005-2010)
- 4. NSFC Grant 11271281: Multiscale modeling, analysis and simulation for the process of chemical vapor infiltration. (2013 2016)