

TAO TANG 湯濤教授

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EDUCATION

1989 Ph.D. in Applied Mathematics, University of Leeds, UK.

1984 B.Sc. in Mathematics, Peking University, China.

ACADEMIC POSITION

2003-present Chair Professor
Dept of Mathematics, Hong Kong Baptist University

2002-present Director of Graduate School, Hong Kong Baptist University

2001-2003 Professor
Dept of Mathematics, Hong Kong Baptist University

1999-2001 Associate Professor (Scale A)
Dept of Mathematics, Hong Kong Baptist University

1992-1998 Associate Professor (with tenure)
Dept of Mathematics, Simon Fraser University, Canada

1990-1992 Assistant Professor
Dept of Mathematics, Simon Fraser University, Canada

HONORS AND FELLOWSHIP

1988: Leslie Fox Prize in Numerical Analysis

2003: Feng Kang Prize in Scientific Computing

2002: Member, International Research Team on Complex System
Chinese Academy of Sciences

EDITORIAL ACTIVITIES

2002-present: SIAM Journal on Numerical Analysis

2001-present: Computers & Fluids (Regional Editor)

2000-present: Journal of Scientific Computing

2002-present: Communications in Mathematical Sciences

2001-present: Communications on Pure and Applied Analysis

2000-present: Mathematica Numerica Sinica

2002-present: Chinese Journal of Computational Physics

VISITING APPOINTMENT

- 2002–present: Distinguished Overseas Scholar
Institute of Computational Mathematics, Chinese Academy of Sciences
- 1995-1998 Visiting Associate Professor
UCLA (1998); CUHK (1997); HKUST (1996); York University (1995)
- 1992-1996 Visiting Member
ETH Zurich (1996); U of Strathclyde (1996); U of Washington (1994);
National U of Singapore (1992)

RESEARCH INTERESTS

Computational Fluid Dynamics
Applied Mathematics, Partial Differential Equations
Scientific Computing, Numerical Analysis

RECENT PUBLICATIONS

1. Boris N. Azarenok and T. Tang, Second-order Godunov-type scheme for reactive flow calculations on moving meshes, *J. Comput. Phys.* **206** (2005), 48-80.
2. Y. Di, Ruo Li, T. Tang, and Pingwen Zhang, Moving mesh finite element methods for the incompressible Navier-Stokes equations, *SIAM J. Sci. Comput.* **26** (2005), 1036-1056.
3. Z.-J. Tan, Z.-R. Zhang, Y.-Q. Huang, and T. Tang, Moving mesh methods with locally varying time steps, *J. Comput. Phys.* **200** (2004), 347-367.
4. H.-Z. Tang and T. Tang, Moving mesh methods for one- and two-dimensional hyperbolic conservation laws. *SIAM J. Numer. Anal.*, **41**, 487-515 (2003).
5. R. Li, W.-B. Lin, H. P. Ma, and T. Tang, Adaptive finite element approximation for distributed elliptic optimal control problems, *SIAM J. Control Optim.* **41** (2002), 1321-1349.
6. R. Li, T. Tang, and P.-W. Zhang, Moving mesh methods in multiple dimensions based on harmonic maps. *J. Comput. Phys.*, **170**, 562-588 (2001).

RECENT INVITED TALKS

- 2005: Workshop on Foundations of Numerical PDEs
(Santander, Spain)
- 2005: International Conference on Scientific Computing (ICSC05)
(Nanjing, China)
- 2004: The Third International Congress of Chinese Mathematicians
(Hong Kong)
- 2004: International Conference on Control, Partial Differential Equations
and Scientific Computing (Beijing, China)

- 2003: Perspectives on incompressible flows
(Maryland, 2003)
- 2002: The 6th Japan-China Joint Seminar on Numerical Mathematics
(Tsukuba, Japan)
- 2001: Workshop on Discretization Methods and Numerical Algorithms for Differential Equations (Kyoto, Japan)
- 2000: 8th Intl Conference on Hyperbolic Problems – Theory, Numerics, Applications
(Magdeburg, Germany)
- 2000: 2nd International Workshop on Scientific Computing & Applications
(Alberta, Canada)

RESEARCH ACTIVITY

Publication List (73 journal papers; 3 edited books)

<http://www.math.hkbu.edu.hk/~ttang/publication.html>

Recent Research Grants

http://www.math.hkbu.edu.hk/Research/grant_information.html

Recent Invited Talks

<http://www.math.hkbu.edu.hk/~ttang/conference.html>

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