RESUME

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I. EDUCATION

A. ACADEMIC DEGREES:

- Ph.D. in Mathematics, 1987, School of Mathematics, University of Mathematics, Minneapolis, Minnesota, USA.
- M.Sc in Mathematics, 1982, Department of Mathematics, National Taiwan University, Taipei, Taiwan, R.O.C.
- B.Sc in Mathematics, 1977, Department of Mathematics, National Taiwan University, Taipei, Taiwan, R.O.C.

B. THESIS TOPICS:

- Ph.D. Numerical Analysis for Liquid Crystal Problems (Advisor: Professor Mitchel Luskin)

II. EMPLEOYMENT HISTROY

- Professor,1994-Present, Department of Aeronautics and Astronautics, National Cheng Kung University, Taiana, Taiwan.
- Advisory Committee, 2007-Present, Fire Protection and Safety Research Center, National Cheng Kung University, Taiana, Taiwan.
- Associate Professor,1988-1994, Department of Aeronautics and Astronautics, National Cheng Kung University, Taiana, Taiwan.
- Postdoctoral Fellow, School of Mathematics, University of Minnesota, Minneapolis, Minnesota, USA.

III. AREAS of RESEARCH INTERESTS

- Applied Mathematics, Numerical Analysis, Computational Fluid Dynamics and Heat Transfer, Fire Safety, Solar Energineer, Two-Phase Flow.

IV. PUBLICATIONS

A. Journal Papers

1. S. Y. Lin, C. T. Lin, Y. S. Chin, and Y. H. Tai, A Direct-Forcing Pressure-based Lattice Boltzmann Method for Solving Fluid-Particle Interaction Problems, Accepted by International Journal for Numerical Methods in Fluids, 2009. (SCI)
2. H. H. Chiu, C. T. Lin, S. Y. Lin, and F. L. Madarasz, Quantum Nanojets Structures: Quantum Branching and Clustering in Two-Slit Electron Jets, Journal of Computational and Theoretical Nanoscience, Vol. 3, pp. 88-100, 2006. (SCI, NSC 83-2212-E-006-038)
3. S. Y. Lin and Z. X. Yu, Vortex Structure and Strength of Secondary Flows in Model Aortic Arches, International Journal for Numerical Methods in Fluids, Vol. 40, 2002, pp. 379-389. (SCI)
4. S. Y. Lin and J. J. Hu, Parametric Study of Weighted Essentially Nonoscillatory Scheme for Computational Aeroacoustics, AIAA Journal, Vol. 39, No. 3, 2001, pp. 371-379. (SCI, NSC 89-2212-E-006-005)
4. S. Y. Lin, S. C. Shih, and J. J. Hu, Dissipation Improvement of MUSCL Scheme for Computational Aeroacoustics, The Chinese Journal of Mechanics, Vol.17, No. 1, 2001, pp. 39-47. (SCI, NSC 86-2212-E-006-015)
5. S. Y. Lin, Y. S. Chin, and B. Y. Chin, Numerical Study on Reduction of Transonic Blade-Vortex Interaction Noise, Journal of Aircraft, Vol. 37, No. 5, 2000, pp. 796-802. (SCI, NSC 86-2212-E-006-105)

S. C. Shih and S. Y. Lin, Discontinuous Finite Element Method for Two Dimensional Conservation Laws, Journal of the Chinese Society of Mechanical Engineers, Vol. 20, No. 2, 1999, pp.121-128. (EI, NSC 86-2212-E-006-105)

B. Conference Papers

1. S. Y. Lin and T. S. Yang, Numerical simulations of effects of steel beam-column connections with heating and cooling phases, Cross-Strait Workshop on Engineering Mechanics, Tainan, Taiwan, ROC, Sep 2008.
2. S. Y. Lin and Y. S. Chin, Discontinuous Galerkin Finite Element Method for Solving Two-Phase Flows, The 4th Japan-Taiwan Workshop on Mechanical and Aerospace Engineering, Hakone, Japan, Oct 2007.
3. T. M. Wu, C. T. Lin, and S. Y. Lin, A Lattice Boltzmann Method for Solving Two-Phase Complex Geometry flows, AIAA Paper 2007-4454, 18th AIAA Computational Fluid Dynamics Conference, Miami, Florida, USA, June 2007. (NSC 95-2221-E-006-149-MY2)
4. Y. S. Chin, J. J. Hu, and S. Y. Lin, An Immersed Boundary-PISO Method for Solving Fluid-Particle Interaction Problems, AIAA Paper 2007-4579, 18th AIAA Computational Fluid Dynamics Conference, Miami, Florida, USA, June 2007. (NSC 95-2221-E-006-149-MY2)
5. J. J. Wu, Y. S. Chin, T. M. Wu, and S. Y. Lin, An Immersed Boundary-Artificial Compressibility Method for Solving Fluid-Particle Interaction Problems, AIAA Paper 2007-4580, 18th AIAA Computational Fluid Dynamics Conference, Miami, Florida, USA, June 2007. (NSC 95-2221-E-006-149-MY2)
6. S. Y. Lin, Y. S. Chin, H. H. Chiu, and Y. C. Chen, A Primitive Preconditioner for Solving All Speed Viscous Flows and Fluid-Particles Interaction Problems, ICAMM 2006, Crete, Greek, Sep 2006.
7. S. Y. Lin, S. C. Shih, and C. H. Tai, A Numerical Study of Flow Fields in a Branching Tube, AIAA Paper 2006-3212, 36th AIAA Fluid Dynamics Conference and Exhibit, San Franciso, USA, June 2006.
8. San-Yih Lin, H. H. Chiu, and C. T. Lin, Numerical Solutions and Structures of Double

Ouantum Jet Sloving by an Upwind Scheme, American Physical Society's Division of Fluid Dynamics 58th Annual Meeting, Chicago, USA, Nov 2005.
9. San-Yih Lin, Sheng-Chang Shih, and Yuan-Hung Tai, Analytic and Numerical Approaches for Circular Cylinder Quantum Nano Jet, AIAA paper 2005-5386, 4th AIAA Theoretical Fluid Mechanics Meeting, Toronto, Canada, Jun 2005.
10. S. Y. Lin and J. J. Hu, Aerodynamic Performance Study of Flapping-Wing Flowfields, AIAA Paper 2005-4611, 23rd AIAA Applied Aerodynamics Conference, Jun 2005.
11. H. H. Chiu, C. T. Lin, S. Y. Lin, and F. L. Madarasz, Developments of Quantum Nanojet Based Nanodevices, ICEE11, S. Carolina, USA, June 2004.
12. J. J. Hu and S. Y. Lin, Numerical Study of Flapping Wing, AIAA Paper, 2003-3448, 33rd AIAA Fluid Dynamics and Exhibit, Orlando, Florida, June 2003.
13. S. Y. Lin and Z. X. Yu, Parallel Numerical Method for Incompressible Navier-Stokes Equations, Parallel CFD 2002, Kansai Science City, Japan, May 2002.
14. J. J. Hu and S. Y. Lin, Parallel Numerical Method for Compressible Flow Calculations of Hovering Rotor Flowfields, Parallel CFD 2002, Kansai Science City, Japan, May 2002.
15. S. Y. Lin and J. J. Hu, Weakly Compressible and Incompressible Navier-Stokes Equations for Hydrodynamic and Hydroacoustic Problems, 8th International Congress on Sound and Vibration, Hong Kong, China, July 2001.
16. S. Y. Lin and Z. X. Yu, Vortex Structure and Strength of Secondary Flows in Aortic Arch, 7th International Conference on Numerical Methods for Fluid Dynamics, University of Oxford, UK, March 2001.
17. S. Y. Lin and J. J. Hu, Parametric Study of WENO Schemes in Truncation, Dissipation, and Dispersion Errors, AIAA Paper 2000-2623, Fluid 2000, Denver Summer Conference, June, 2000.