

CURRICULUM VITAE

GENERAL INFORMATION

Name: Huai-Yu Jian Sex: Male
Date and Place of Birth: Nov. 15, 1962; Xingshao, Hunan Province, P.R.China
Marital Status: Married Nationality: Chinese
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Research Interest: Partial differential equations(including Variation Calculus), Geometric Analysis

EDUCATION BACKGROUND

1979-1983: Undergraduate, BS, Hunan Normal University, Changsha.
1985-1988: Graduate, MS, Hunan University, Changsha.
1991-1994: Graduate, Ph.D, Tsinghua University, Beijing.

EMPLOYMENT EXPERIENCE

1983-1985: Lecturer, Huaihua Normal college, Hunan Province.
1988-1991: Assist. Prof., Huaihua Normal College.
1994-1996: Post Doctor and Associate Prof., Institute of Mathematics, Academia Sinica, Beijing.
1996-1999: Associate Prof., Tsinghua University.
2000-present: Full Professor, Tsinghua University.

RESEARCH PROGRAMM AND GRANTS

1996-1999: The dynamics of Nonlinear evolution equations—National Natural Science Foundation (No. 19701018)
2000-2005: Ginzburg-Landau Superconductors and Curvature Flows— National 973-Project Foundation by the Ministry of Science (No. G1999075)
2001-2004: Fully nonlinear elliptic and parabolic equations— Trans-Century Training Programme Foundation for the talents by the MOE of China(NO. JKH-[2001]-3)
2006-2010: nonlinear elliptic and nonlinear parabolic equations—Key Project of National Natural Science Foundation (No. 10631020)
2011-2016: nonlinear elliptic and nonlinear parabolic equations—Key Project of National Natural Science Foundation (No. 11131005)

AWARDS AND HONORS

Excellent Teacher of Tsinghua University, 1997, 1998
First Prize for Mathematical papers of the City of Beijing, 1999
Trans-Century talents of the Ministry of Education of China, 2000
Editors of Advance in Mathematics (China)(from 2002), Northeastern Mathematical Journal (from 2004) and Frontiers of Mathematics (from 2004), Acta Applied Math (from 2006).

Secretary -general of Chinese Society for Industrial and Applied Mathematics(from 2004 to 2008)

Regular Associate Member of Abdus Salam International Center of Theoretical Physics (from 2005 to 2011)

VISITING AND FELLOWSHIP (Partial)

08-1995–10-1995: Visitor at ICTP and Pisa University

12-1995–02-1996: Fellowship at The Hong Kong University of Science and Technology

07-1996–11-1996: Research Fellowship at the Chinese University of Hong Kong

10-1999–11-1999: Visiting Scholar at National University of Singapore, Singapore

09-2000–07-2001: Advanced Visiting Scholar at Harvard University, USA

09-2001–02-2002: Research Visiting Fellow at University of Tennessee, Knoxville, USA

01-2004–06-2004: Special visitor (Research and Teaching) at University of Connecticut, USA

02-2006–05-2006: Research Associate, The Australia National University.

07-2006–08-2006: Visiting research at the Chinese University of Hong Kong

01-2007–02-2007: Research fellow at National University of Singapore, Singapore

10-2008–12-2008: Visiting professor at Hong Kong University of sciences and technology

12-2009–01-2010: Visiting professor at National University of Singapore, Singapore

2-2010–08-2010: Research Fellow, The Australia National University.

12-2010–01-2011: Visiting professor at National University of Singapore, Singapore

Short visiting: Cambridge University, 1999; Brown University, 2001; Massachusetts Institute of Technology, 2001; University of Michigan, 2001; UBC, 2004.; Freie University Berlin, 2007.

INVITED TALKS (Partial)

1. Invited talk, Nonlinear Partial Differential Equations from Mechanics, Hong Kong, May 31-June 5, 1999.

2. Invited talk, The Second International conference On Nonlinear Analysis, Tianjing China, 14-19 June 1999.

3. Invited talk, The First Mathematical Conference of China- Canada, Beijing, Aug.22-27, 1999.

4. Invited talk, The Recent Trends in Pure and Applied Mathematics, Boston, April. 5-8, 2001.

5. Plenary talk, Nonlinear Partial Differential Equations in Mechanics and Physics— Satellite Conference to ICM2002, Harbin, Aug.29-Sep3, 2002.

6. Invited talk, China-Germany Workshop on Geometric Analysis, Beijing, Oct.19-23, 2003.

7. Plenary talk, Workshop on Geometric Partial Differential Equations, Singapore, May 27-June 3, 2004.

8. Organizing the 7th Annual Conference of SCIAM-Contemporary Applied Mathematics-Frontier and Prospect, Xiangtan and Zhangjiajie, Aug 24-30, 2006.

9. One Organizer of the Workshop on Geometric Analysis, Changsha and Zhangjiajie, May 30-June 5, 2005. (the others are Weiyue Ding and Gang Tian)
10. One organizer of the international conference on nonlinear PDEs, Changchun, Aug 13-20, 2005.
11. Organizing the 8th Annual Conference of SCIAM-Applied maths in China, Nanjing, Aug 14-18, 2006.
12. Plenary talk, Australia-China Conference on Nonlinear PDEs, Australia-Brisbane July 1 to 7, 2007.
13. Invited talk, Fourth Pacific Rim Conference on Mathematics, Hong Kong, December 6 to 12, 2007.
14. Plenary talk, International conference on nonlinear PDEs, Harbin, June 22-28, 2008
15. Invited talk, American Mathematical Society-Shanghai Mathematical Society Joint Meeting, Shanghai Dec. 17-21, 2008.
16. Invited talk, Chinese-Australia joint conference on PDEs, Kunming, Yunnan, June 27-July 2, 2009.
17. Invited talk, Fifth Pacific Rim Conference on Mathematics, Stanford University, June 28-July 2, 2010.
18. Invited talk, Fifth Pacific Rim Conference on Mathematics, Stanford University, June 28-July 2, 2010.
19. Invited talk, First "Sino-Chilean Conference on Nonlinear Elliptic and Parabolic PDE", Wuhan, Dec 4-Dec 10, 2010.
20. Invited talk, The International Congress of Chinese Mathematicians, Beijing, Dec 17-Dec 22, 2010.

A LIST OF MAIN PAPERS

- [1] (with Ling Hsiao), Global smooth solutions to the spatially periodic Cauchy problem for dissipative nonlinear evolution equations, *J. Math. Anal. Appl.* 213, 262-274, (1997).
- [2] (with Ling Hsiao), On the asymptotic behaviour of initial boundary value problems in one-dimensional nonlinear thermoviscoelasticity, *Chinese Math. Ann. (Ser B)* 18(2), 143-152 (1998).
- [3] (with D.Y.Hsieh, Xiaoping Wang) The global attractor of a dissipative nonlinear system, *J. Math Anal Appl*, 238, 124-142, (1999).
- [4] Deforming convex hypersurfaces to the hypersurfaces with prescribed harmonic mean curvature, *Science in China, Ser. A.* 42(10), 1059-1066 (1999)
- [5] On the homogenization of degenerate parabolic equations, *Acta Math Appl Sinica New Ser.* 16(1), 100-110, (2000).
- [6] Gamma -convergence of integral functionals depending on vector-valued functions over parabolic domains, *Chinese Math. Ann. (Ser B)*, 21B(2000) No 2, 249-258.
- [7] (with B. Song) The Vortex dynamics of a Ginzburg-Landau system in inhomogeneous superconductors , *Journal of Differential Equations*, 170(2001)No 1, 123-141.
- [8] (with Xingwang Xu) The vortex dynamics of a Ginzburg-Landau system under pinning effect, *Science in China, Ser. A.* 46(4)(2003), 488-498.

- [9] (with Bo Guan) The Monge-ampere equation with infinite boundary value, Pacific J. Math., 216(2004), 77-84.
- [10] (with X Q Chen) The radial solutions of Monge-ampere equations and the semi-geostrophic system, Advanced Nonlinear Studies, 5(2005),567-580.
- [11] (with B. Song) Solutions of the anisotropic porous medium equation in R^n under L^1 -initial values, Nonlinear Analysis TMA, 64(9)(2006), 2098-2111.
- [12] Translating solitons of mean curvature flow of noncompact spacelike hypersurfaces in Minkowski space, Journal of Differential Equations, 220(2006), 147-162.
- [13](with Bo Guan and Richard Schoen) Entire spacelike convexhypersurfaces of constant Gauss curvature in Minkowski space, J. fur reine und Angew. Math., 595(2006),167-188.
- [14] Hessian equations with Infinite Dirichlet Boundary Value, Indiana Univ. Math J.,55(2006),1045-1062.
- [15] (with Y N Liu) The Ginzburg-Landau Vortex and mean curvature flow with external force field, Acta Math. Sinica (Engl. Ser.), 22(2006), 1831-1842.
- [16] (with Y N Liu) Evolution of hypersurfaces by mean curvature minus external force field, Science in China, Ser A, 50(2)(2007),231-239.
- [17](with Xujia Wang) Continuity estimates for the Monge-Ampere equation, SIAM J Math Anal vol 39(2)(2007), pp.608-626
- [18] (with Yannan Liu) Long-time existence of mean curvature flow with external force field, Pacific J. Math., 234(2), 311-324, 2008
- [19](with L Chen and X Q Chen) Existence, Semiclassical Limit and Long-time Behavior of Weak Solution to Quantum Drift-diffusion Model, Nonlinear Analysis Real World Application, 20(3), 1321-1342, 2009
- [20](with Y Huang and N Su) spacelike hypersurfaces of prescribed Gauss-Kronecker Curvature in Exterior Domains, Acta Math Sinica English Series 25(3), 491-502, 2009.
- [21](with Y N Liu) A curvature flow evolved by a fourth order parabolic equation, Science in China Series A, 52(2009), 2177-2184.
- [22](with Y N Liu) Evolution of spacelike hypersurfaces by mean curvature minus external force field in Minkowski space, Advanced Nonlinear Studies, 9(2009), 513-522.
- [23] (with H Ju and W Sun) Traveling fronts of a mean curvature flow with external force field, Comm Pure Appl Anal,9(4)(2010), 975-986.
- [24] (with H Ju, Y Liu and W Sun) Symmetry of translating solutions to mean curvature flows, Acta Math Scientia, 30 (6B) (2010), 2006-2016.
- [25](with C Gui and H Ju) Properties of translating solutions to mean curvature flow, Discrete and Continuous Dynamical Systems, 28(2), 2010.
- [26] (with H Ju and J Lu)Translating solutions to mean curvature flow with a forcing term in Minkowski Space, Comm Pure Appl Anal, 9(4)(2010), 963-973.
- [27] (with H Ju) Existence of Translating solutions to the flow by the powers of mean curvature on bounded domains, Journal of Differential Equations, 250(2011), 3957-3987.
- [28] (with Xu-Jia Wang) Bernstein theorem and regularity for a class of Monge-Ampere equation, preprint, 2010.

- [29] (with Xu-Jia Wang) The global regularity for a fully nonlinear singular elliptic equations, Preprint, 2011.
- [30] (with John Urbas and Xu-Jia Wang) Entire solutions of Monge-Ampere equation and translating solutions to Gauss curvature flow, Preprint, 2011.