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Employment/Position

- Professor. University of California, Davis. 2003-present
- Associate Professor. University of California, Davis. 1999-2003
- Assistant Professor. University of California, Davis. 1995-1999
- Research Assistant Professor. University of California, Los Angeles. 1992-1995

Education/Experience

- Courant Institute, New York University. 1987-1992
Ph.D. in Applied Mathematics
- Military Service, Taiwan, ROC. 1985-1987
- National Tsing-Hua University, Taiwan. 1981-1985
B.S. in Mathematics, top honor.

Awards

- Centennial Fellowship of American Mathematical Society, 2002.
- UC Davis Chancellor's Fellow, 2001-2006.

Grants

- PI, NSF DMS 0908535. Project title: Propagation, Focusing and Imaging in Complex Media.
- Co-PI, DARPA 2006. Project title: Time-Reversal and Imaging in Complicated Environments.
- Co-PI, DARPA 2003. Project title: Imaging and Time Reversal in Cluttered Media.
- PI, National Science Foundation grant DMS-030665.
- PI, National Science Foundation Grant No. DMS-9971322
- Co-PI, National Science Foundation Grant No. DMS-97-07756
- PI, National Science Foundation Grant No. DMS-96-00119

Editorial Board

- Multiscale Modeling and Simulation: A SIAM Interdisciplinary Journal: 2007-present

Biographical Listing

- Marguis Who's Who in Science and Engineering, 2006.
- Marguis Who's Who in America, 2002.

Publications

- [1] A. Fannjiang and G. Papanicolaou. Convection Enhanced Diffusion for Periodic Flows. *SIAM Journal on Applied Mathematics* 54:2 (1994), pp. 333-408.
- [2] A. Fannjiang. Time Scales in Noisy Conservative Systems. *Lecture Notes in Physics* 450 (1995), pp. 124-139.
- [3] A. Fannjiang and G. Papanicolaou. Diffusion in Turbulence. *Probability Theory and Related Fields* 105 (1996), pp. 279-334.
- [4] A. Fannjiang and G. Papanicolaou. Convection Enhanced Diffusion for Random Flows. *Journal of Statistical Physics* 88:5-6 (1997), pp. 1033-1076.
- [5] A. Fannjiang and T. Komorowski. A Martingale Approach to Homogenization of Unbounded Random Flows. *The Annals of Probability* 25:4 (1997), pp. 1872-1894.
- [6] A. Fannjiang. Boundary Value Problems with Unbounded Random Flows. *Journal of Differential Equations* 143:2 (1998), pp. 327-359.
- [7] A. Fannjiang. Anomalous Diffusion in Random Flows. *The IMA Volumes in Mathematics and its Applications* 99 (1998), pp. 81-99.
- [8] A. Fannjiang, L. Ryzhik and G. Papanicolaou. Evolution of Trajectory Correlations in Steady Random Flows. *Proceedings of Symposia in Applied Mathematics* 54 (1998), pp. 105-130.
- [9] A. Fannjiang. Phase Diagram for Turbulent Dispersion. *Advances in Turbulence VII*, U. Frisch ed., Proceedings of the Seventh European Turbulence Conference (1998), pp. 531-534.
- [10] G.H. Paulino, A. Fannjiang and Y.-S. Chan. Gradient Elasticity Solution for a Mode III Crack in a Functionally Graded Materials. *Materials Science Forum* 308-311 (1999), pp. 971-976. (with Y.-S. Chan and G.H. Paulino).
- [11] A. Fannjiang and T. Komorowski. An Invariance Principle for Diffusion in Turbulence. *The Annals of Probability* 27:2(1999), pp. 751-781.
- [12] A. Fannjiang and T. Komorowski. Turbulent Diffusion in Markovian Flows. *The Annals of Applied Probability*. 9:3(1999), pp. 591-610.
- [13] G. Bal, A. Fannjiang, G. Papanicolaou and L. Ryzhik. Radiative Transport in a Periodic Structure. *Journal of Statistical Physics* 95:1-2 (1999), pp.479-494.

- [14] A. Fannjiang and T. Komorowski. Limit Theorems for Motions in a Flow with a Nonzero Drift. *Bulletin of the Polish Academy of Sciences* 47:4 (1999), pp. 393-413.
- [15] A. Fannjiang. Phase Diagram for Turbulent Transport: Sampling Drift, Eddy Diffusivity and Variational Principles. *Physica D*, 136: 1-2(2000), pp. 145-174. Erratum. *Physica D* 157 (2001), pp. 166-168.
- [16] A. Fannjiang and T. Komorowski. Diffusion Approximation for Particle Convection in Markovian Flows. *Bulletin Polish Academy Sciences* 48 (3) (2000), pp 253-275.
- [17] A. Fannjiang and T. Komorowski. Fractional Brownian Motions and Enhanced Diffusion in a Unidirectional Wave-like Turbulence. *Journal of Statistical Physics*, 100:5/6(2000), pp. 1071-1095.
- [18] A. Fannjiang and T. Komorowski. Fractional Brownian Motion Limit for Turbulent Motion. *The Annals of Applied Probability*, 10:4(2000), pp. 1100-1120.
- [19] G.H. Paulino, Y.-S. Chan and A. Fannjiang. The Crack Problem for Nonhomogeneous Materials Under Antiplane Shear Loading — A Displacement Based Formulation. *International Journal of Solids and Structures*38:17(2001), pp. 2989-3005
- [20] A. Fannjiang and L. Ryzhik. Radiative Transfer of Sound Waves in a Random Flow: Turbulent Scattering, Straining and Mode-Coupling. *SIAM Journal on Applied Mathematics* 61:5(2001), pp. 1545-1577.
- [21] A. Fannjiang and T. Komorowski. Invariance Principle for a Diffusion in a Markov Field. *Bulletin of the Polish Academy of Sciences*49:1(2001), pp. 45-65.
- [22] A. Fannjiang. Time Scales in Homogenization of Periodic Flows with Vanishing Molecular Diffusion. *Journal of Differential Equations* 179 (2002), pp. 433-455.
- [23] A. Fannjiang, T. Komorowski and S. Peszat. Lagrangian Dynamics for a Passive Tracer in a Class of Gaussian Markovian Flows. *Stochastic Processes and Their Applications*97 (2002), pp. 171-198.
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- [25] A. Fannjiang, Y.S. Chan and G. Paulino. Strain Gradient Elasticity for Anti-Plane Shear Cracks: A Hypersingular Integrodifferential Equation Approach. *SIAM Journal on Applied Mathematics*62:3(2002), pp. 1066-1091.
- [26] Y.-S. Chan, A.C. Fannjiang and G.H. Paulino. Gradient Elasticity Theory for Mode I Crack in Functionally Graded Materials. *Ceramic Transactions* 114(2001), pp. 731-738.
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- [30] A. Fannjiang and T. Komorowski. Frozen Path Approximation for Turbulent Diffusion and Fractional Brownian Motion in Random Flows. *SIAM Journal on Applied Mathematics*63:6(2003), pp. 2042-2062.
- [31] A. Fannjiang, S. Jin and G. Papanicolaou. High Frequency Behavior of the Focusing Nonlinear Schrödinger Equation with Random Inhomogeneities. *SIAM Journal on Applied Mathematics*63(2003), pp. 1328-1358.
- [32] A. Fannjiang and L. Wolowski. Noise-Induced Dissipation in Time Discrete Systems, *Journal of Statistical Physics*, 113:112 (2003), pp. 335-378.
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- [44] A. Fannjiang. Phase Space Models for Stochastic Nonlinear Parabolic Waves: Wave Spread and Singularity, *J. Phys. A* 39 (2006), 11383–11398.
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