

Hoanh X. Vu

Educational Background:

Ph.D. Applied Physics, California Institute of Technology, 1990, **Advisor:** Prof. Roy W. Gould.
B.S. Physics, University of California, Los Angeles, 1985.

Employment History:

SciberQuest, Inc., Computational Physicist

University of California, San Diego: Lecturer and Research Associate, Level III.

University of California, Los Angeles: Visiting Professor, 8/2000-8/2001

Los Alamos National Laboratory: Technical Staff Member, 4/92-3/2002.

Honors and Awards:

- DOE Magnetic Fusion Science Fellowship, 1985-1988.
- Los Alamos Achievement Award with citation, ``Let it be known that Hoanh X. Vu is recognized with a Los Alamos Achievement Award for the development of a unique massively-parallel hybrid simulation model for studying laser-plasma instabilities,`` 1996.

Invited Talks:

1. *CELESTID: An Implicit, Fully-Kinetic Model for Low-Frequency, Electromagnetic Plasma Simulation*, Fourth International School for Space Simulation, Nara, Japan, 1991.
2. *Three Dimensional Simulations of Ion-Driven Parametric Instabilities*, Thirty-Eighth Annual Meeting of the Division of Plasma Physics (American Physical Society), Denver, Colorado, Nov. 11-15, 1996.
3. *Laying A Foundation for Laser-Plasma Interaction Modeling Relevant to the National Ignition Facility*, CPP99/American Physical Society Centennial Celebration, Atlanta, Georgia, Mar. 21-26, 1999.
4. *The Effect of Kinetic Processes on Langmuir Turbulence*, Forty-First Annual Meeting of the Division of Plasma Physics (American Physical Society), Seattle, Washington, Nov. 15-19, 1999.
5. *Transient Enhancement and Detuning of Laser-Driven Parametric Instabilities by Particle Trapping*, 30th Anomalous Absorption Conference, Ocean City, Maryland, May 22-26, 2000.
6. *Transient Enhancement and Detuning of Laser-Driven Parametric Instabilities by Particle Trapping*, Forty-Second Annual Meeting of the Division of Plasma Physics (American Physical Society), Quebec City, Quebec, Canada, Oct. 23-27, 2000.

Selected Publications:

- [1] K.Y. Sanbonmatsu, **H.X. Vu**, D.F. DuBois, and B. Bezzerides, A New Paradigm for the Self-Consistent Modeling of Wave-Particle and Wave-Wave Interactions in the Saturation of Electromagnetically Driven Parametric Instabilities, *Phys. Rev. Lett.* **82**, 932 (1999).
- [2] **H.X. Vu**, B. Bezzerides, and D.F. DuBois, ASPEN: A Fully Kinetic, Reduced-Description Model for Simulating Parametric Instabilities, *J. Comput. Phys.* **156**, 12 (1999).
- [3] **H.X. Vu**, K.Y. Sanbonmatsu, B. Bezzerides, and D.F. DuBois, Laying a Foundation for Laser-Plasma Modeling for the National Ignition Facility, *Comput. Phys. Commun.* **127**, 71 (2000).
- [4] **H.X. Vu**, D.F. DuBois, and B. Bezzerides, Transient Enhancement and Detuning of Laser-Driven Parametric Instabilities by Particle Trapping, *Phys. Rev. Lett.* **86**, 4306 (2001).
- [5] **H.X. Vu**, D.F. DuBois, and B. Bezzerides, Kinetic Inflation of Stimulated Raman Backscatter in Regimes of High Linear Landau Damping, *Phys. Plasmas* **9**, 1745 (2002).