## Patrick H. Diamond

**Education** Massachusetts Institute of Technology

1976 S.B. Physics; S.B. Mathematics

1979 Physics Ph.D.

**Professional Employment** 

WCI Fusion Theory Institute, NFRI Director 9/10-Present

Kyushu University Visiting Professor 1-3/05, 10-12/07, 1/10

Peking University Visiting Professor 12/08-Present University of Cambridge Visiting Sr. Fellow 9/04-12/04 University of California, San Diego Assoc./Professor-Distinguished 7/87-Present University of Texas, Austin Sr Lecturer/Research-Sr Staff Scientist 10/80-10/87 Institute for Advanced Study, NJ Member 9/79-5/80 Massachusetts Institute of Technology 3/79-8/79 Research Associate

## **Honors and Awards**

- Karl Taylor Compton Graduate Fellowship, Dept. of Physics, M.I.T. 9/76-3/79
- Paper "Theory of Resistivity Gradient Driven Turbulence", Technical Achievement Award, Martin Marietta Energy Systems (ORNL), 1985
- Elected Fellow of American Physical Society, 1986
- Alfred P. Sloan Foundation Fellow, 1988
- National Science Foundation Presidential Young Investigator Award, 1989
- Finalist, Alan T. Waterman Award Competition National Science Foundation, 1990, 1991
- Distinguished Professor, UCSD, 2007
- 2011 Hannes Alfven Prize, EPS Plasma Physics Division (shared-Hasegawa & Mima)
- IAEA Nuclear Fusion Award, 2012

Research Interests and Expertise: Patrick H. Diamond is the author of over 400 publications dealing with plasma physics and controlled fusion and especially with topics in plasma and fluid turbulence, transport, dynamo theory and plasma astrophysics. Diamond has 22 papers with 100 or more citations, 51 papers with 50 or more citations and has an H-index of 50. He has supervised 24 completed Ph.D. theses and 24 postdoctoral researchers. He has been the Principal Investigator of the fusion theory group at UCSD for over 23 years and is Co-Principal Investigator of the Center for Momentum Transport and Flow Self-Organization (CMTFO), UCSD, and the Director of the Fusion Theory Institute, NFRI, Korea.

## **Organizer**

- JIFT U.S.-Japan Workshop on Magnetic Reconnection, 1984
- USA-USSR Exchange on Microturbulence, 1986
- STTP Workshop on Solar Flares, 1986
- Co-Organizer, San Diego Summer School on Turbulent Transport, 1989
- Co-Organizer, Nonlinear Wave and Chaos III Workshop, 1999
- Scientific Organizing Committee, Festival de Theorie, 2001,
- Co-Organizer, U.S.-Japan Joint Institute or Fusion Theory (JIFT) Workshop, 2002, 2007
- External Member, Specially Promoted Project on Structure Formation in Plasma, 2004-present
- Co-Organizer, International School on Plasma Turbulence and Transport, 2006
- Program Committee Chair, Asian Summer School on Plasma Simulation, 2006
- Co-Organizer, 11<sup>th</sup> EU-US Transport Task Force Workshop, 2006
- Leader, U.S. Transport Task Force, 2009-2010; Deputy Leader, 2007-2008

- Organizer, Gyrokinetic Particle Simulation of Turbulent Transport in Burning Plasmas Workshop, 2008
- Leader, Theory and Computation Milestone Effort in Momentum Transport, 2010
- Scientific Organizing Committee, International Summer Institute for Modeling in Astrophysics, 2010
- Organizer, 1st Asia Pacific Transport Working Group (APTWG) International Conference, 2011
- Chairman, Scientific Organizing Committee, Festival de Theorie, 2003, 2005, 2007, 2009, 2011
- Principal Investigator, SciDAC Project on Gyrokinetic Particle Simulations of Turbulent Transport in Burning Plasmas (GPS-TTBP), 2007-2011
- Scientific Organizing Committee, 6<sup>th</sup> Korean Astrophysics Workshop 'Fundamental Processes of Astrophysical Turbulence', APCTP, 2011
- Co-Organizer, 2<sup>nd</sup> Asia-Pacific Transport Working Group (APTWG) Meeting, 2012
- Chairman, Scientific Organizing Committee, 2<sup>nd</sup> East-Asian School and Workshop on Laboratory, Space, Astrophysical Plasmas, 2012