EDISON P. LIANG

Andrew Hayes Buchanan Professor of Astrophysics Biographical Sketch

Edison P. Liang was raised and educated in Hong Kong and California. He majored in physics at the University of California, Berkeley, leading to a BA in Physics in 1967 and PhD in Astrophysics in 1971 at the age of 23 years. He was a recipient of the prestigious University of California Science Fellowship and Anthony Scholarship (1967-1969). His PhD Thesis on the classical and quantum structure of the cosmological singularity was under the guidance of Professors R.K. Sachs and J. Silk.

From August 1971 through August 1975, Dr. Liang was research associate in the Physics Departments of the University of Texas and the University of Utah, with excursion to Oxford and Cambridge Universities in England (summer 1974) under a British SRC fellowship sponsored by Profs. Dennis Sciama and Roger Penrose. Dr. Liang was appointed Assistant Professor at Michigan State University in 1975, and moved to Stanford University a year later, where he was a member of the Physics and Applied Physics faculty, teaching and conducting research in astrophysics, plasma physics and cosmology, till 1980.

In 1980, he joined the staff of Lawrence Livermore National Laboratory as a physicist and project leader. He rose to become group leader, and later Associate/Deputy Division Leader in the LLNL Physics Directorate, directing research in both programmatic areas and basic research in plasma radiation and astrophysics. He left LLNL to become Professor at Rice University in 1991. He currently holds the Andrew Hays Buchanan Chair Professor of Astrophysics at Rice University. He also served as the Associate Chairman of the Department of Physics and Astronomy at Rice University and the Associate Director of the Rice Space Institute.

Dr. Liang is a Fellow of the American Physical Society, and a member of the Sigma Xi and Phi Beta Kappa Honor Societies. He has served the American Physical Society in many capacities, including Chair of the Topical Group on Plasma Astrophysics (2003-2004). He is the author or coauthor of over three hundred publications in plasma physics, astrophysics, cosmology and applied physics, plus several scores of LLNL programmatic reports. His current research interests include relativistic plasmas, laser-plasma interactions, radiation hydrodynamics, high energy density physics and high-energy astrophysics (black holes, gamma-ray bursts and particle acceleration). He has co-organized more than a dozen international conferences, including the biannual conference series on High Energy Density Laboratory Astrophysics (HEDLA), which had its fifth meeting in March 2006 on Rice University campus. Dr. Liang is a pioneer and champion of high energy density physics, and contributed significantly to several recent reports on HEDS, including the NAS report on High Energy Density Physics chaired by Ron Davidson, the NAS report on "Physics of the Universe" chaired by Mike Turner and Roger Blandford, and the SAUUL report chaired by Todd Ditmire. A complete list of his publications can be found at the website: http://spacibm.rice.edu/~liang/biography_publications