

## **Brief Biographical Sketch**

**Luís M. A Bettencourt [Technical Staff Member, T-7, LANL]** obtained his PhD from Imperial College, University of London, in 1996 for work on critical phenomena in the early Universe, and associated mathematical techniques of Statistical Physics, Field Theory and Non-linear Dynamics. He held postdoctoral positions at the University of Heidelberg, Germany, as a Director's Fellow in the Theoretical Division at LANL, and at the Center for Theoretical Physics at MIT. In 2000 he was awarded the distinguished Slansky Fellowship at Los Alamos National Laboratory for excellence in interdisciplinary research. He has been a Staff Member at LANL since the spring of 2003, first at the Computer and Computational Sciences Division (CCS), and since September 2005 in the Theoretical Division (T-7: Mathematical Modeling and Analysis). He is also External Research Faculty at the Santa Fe Institute [effective July 2007], and a Research Professor at the Department of Mathematics and Statistics and the School of Human Evolution and Social Change at Arizona State University.

Dr. Bettencourt carries research in the structure and dynamics of several complex systems, with an emphasis on dynamical problems in biology and society. Currently he works on real time epidemiological estimation, social networks of human communication, distributed sensor networks, information processing in neural systems and urban organization and dynamics. He maintains many diverse multidisciplinary collaborations at LANL, and beyond at the Santa Fe Institute, ASU, Princeton University, Harvard, MIT, SAMSI, and UC Davis. He is a member of advisory committees for international conferences and referees for journals in physics, mathematics and computer science, and for international fellowship programs. In the last three years he has co-advised four PhD thesis, in epidemiology, complex networks, computational neuroscience and statistical mechanics. He is also a consultant for the Office Science and Technology Information of the US Department of Energy on the subject of scientific innovation and discovery.