

Informal Get Together For HSS Staff With Professor Brian Arthur

This is an informal session for interaction with Professor Arthur on his recent research works.

Date: 1 April 2009, Wednesday

Time: 2.30pm - 3.30pm

Venue: HSS Meeting Room (S3.2-B1-09)

Chairperson: Professor David Reisman

Biography

Professor Brian Arthur is a pioneer of Complexity Theory. He is External Professor at Santa-Fe Institute and former Dean of Population Studies and Economics at Stanford. Professor Arthur's work is largely inter-disciplinary and has been fascinated with technology and how it evolves. He has been involved in the science of complexity: the science of how patterns and structures self-organize. In particular, he is interested in creating a more realistic, non-equilibrium version of economics. This type of economics assumes that the actors in the economy do not necessarily face well-defined problems or use exaggerated forms of rationality in making their decision, but they react to the outcomes they together create. Viewed this way, we find that the economy is not in stasis, but always forming, always evolving, and always "discovering" fresh novelty. It contains pockets of indeterminacy and shows properties we associated with formal complexity. Professor Arthur has spent much of his earlier career developing a theoretical framework for economic allocation under increasing returns, in particular studying the dynamics of lock-in to one of many possible outcomes under the influence of small, random events. High technology operates under increasing returns, and to the degree modern economies are shifting toward high tech, the different economics of increasing returns alters the character of competition, business culture, and appropriate government policy in these economies. He is a well-known keynote speaker at conferences and meetings. Some recent topics: How is the digital revolution playing out in the economy? How exactly does innovation work and how can it be fostered? If manufacturing and services are heading overseas to China and other countries, how can the US and Europe retain their national competitiveness? In what way will the new technologies—IT, genomics, nanotech—unfold in the economy?

Please register at eveyeo@ntu.edu.sg if you are attending.