

# UPDATE



February 2006

SANTA FE INSTITUTE

## INSIDE SFI: ON AND OFF THE COWAN CAMPUS

<http://www.santafe.edu/events/update/insidesfi.php>

### THE NEW, NEW PALGRAVE

SFI Science Board member **Steven Durlauf** (University of Wisconsin) and External Faculty member **Larry Blume** (Cornell University) are editing the new edition of the most influential reference work in economics, *The New Palgrave Dictionary of Economics*. R. H. Inglis Palgrave's original *Dictionary of Political Economy* first appeared in 1894-1899, and was revised in 1923-1926 by Henry Higgs. *The New Palgrave Dictionary of Economics*, edited by John Eatwell, Murray Milgate, and Peter Newman, was published in 1987. The massive (6 volumes, more than 5 million words) new edition covers all of economics and related fields, and is expected to appear in 2008. Durlauf and Blume headed the former Economics Program at the Santa Fe Institute from 1996 through 1998. The New Palgrave (to be published by Palgrave Macmillan) will have a decidedly Santa Fe accent, with contributions from a number of members of the SFI research community. In addition, **Kenneth Arrow**, one of the founders of the Economics Program, is an advisory editor for the project.

### SAM BOWLES CO-EDITS NEW BOOK

SFI Professor **Samuel Bowles**, together with **Pranab Bardhan** and **Michael Wallerstein**, edited a book entitled *Globalization and Egalitarian Redistribution*, which was published by Princeton University Press.

The book demonstrates that the free flow of goods, capital, and labor has increased in inequality or volatility of labor earnings in advanced industrial societies—while constraining governments' ability to tax the winners from globalization to compensate workers for their loss.

For more information, please see <http://www.pupress.princeton.edu/titles/8177.html>

### CONSTANTINO TSALLIS TO TEACH IN SPAIN

SFI Visiting Researcher **Constantino Tsallis**, will present a one-week course on Nonextensive Statistical Mechanics in Madrid, Spain in February. Various recent aspects developed at SFI with Professors **Murray Gell-Mann** and **J. Doyne Farmer**, SFI Postdoctoral Fellow **Yuzuru Sato**, and **Stefan Thurner** (University of Vienna), and **Luis Moyano** (Centro Brasileiro de Pesquisas Fisicas), will be presented as well.

For more information, please see <http://matap.dmae.upm.es/Tsallis/CursoTsallis.htm>

### FEBRUARY PUBLIC LECTURE

The Santa Fe Institute will present a Public Lecture on **Wednesday, February 22, 2006, at 7:00 pm**, not 7:30 as previously announced. It will be at the Lentic Performing Arts Center.

The lecture entitled "The 'Hobbit' of Flores Island: Body and Soul" will be given by **Dean Falk**, Hale G. Smith Professor and Chair, Anthropology, Florida State University.

February 2006

Scientists were shocked at the recent discovery of a miniature human species (LB 1, *Homo floresiensis*) who lived a mere 18,000 years ago on the Indonesian island of Flores. The most complete specimen is a three-foot tall woman, nicknamed Hobbit, who had long arms, and a little ape-sized braincase. Associated archaeological evidence suggests that this tiny species fashioned sophisticated tools, hunted miniature elephants, made fire, and cooked. How could this be, given their tiny brains? To glean details about its brain, an international team analyzed three-dimensional computed tomographic (3DCT) reconstructions of Hobbit's internal braincase. Their findings have startling implications for the evolution of the brain and intelligence not just in hobbits, but throughout the human fossil record.

This lecture is co-sponsored with the School of American Research.

For more information, please see <http://www.santafe.edu/events/publicLectures>

## PAPER TO APPEAR IN *NATURE*

Jessica Flack, Michelle Girvan (SFI Postdoctoral Fellows), Frans de Waal (Professor, Emory University), and David Krakauer's (Professor, SFI) paper entitled "Policing Stabilizes Social Niche Construction in Primates," has been accepted for publication in *Nature*. It will appear on Thursday, January 26, 2006.

## BUSINESS NETWORK NEWS

<http://www.santafe.edu/events/update/businessnetwork.php>

## OPPENHEIMERFUNDS JOINS THE BUSINESS NETWORK

We welcome OppenheimerFunds as a new member of the SFI Business Network. OppenheimerFunds is one of the largest asset management companies in the United States. They offer a broad range of

products and services to individuals, corporations, and institutions, including mutual funds, separately managed accounts, investment management for institutions, hedge fund products, qualified retirement plans, and subadvisory investment-management services.

To learn more about OppenheimerFunds please see [www.oppenheimerfunds.com](http://www.oppenheimerfunds.com)

## BUSINESS NETWORK FELLOWSHIP 2006

The 2006 Business Network Fellowship position is open to individuals from member companies of the Santa Fe Institute Business Network. This position allows an individual up to four weeks of visitation at the Institute over a two-year period to pursue research congruent with the science of the Santa Fe Institute. One Fellowship per year is awarded.

For more information, please see <http://www.santafe.edu/business/fellowship.php>

## NOTES FROM THE INTERNATIONAL PROGRAM

<http://www.santafe.edu/events/update/international.php>

## SFI IN BOGOTA, COLOMBIA

A working group meeting on "Foundations of Cooperation in the Commons" will be held at the University of Los Andes, Bogota, Colombia, on February 9-11, 2006. Former International Fellow **Juan Camilo Cardenas** is co-organizing the event with SFI Professor **John Miller**.

## PUBLICATIONS

<http://www.santafe.edu/events/update/publications.php>

## WORKING PAPERS

<http://www.santafe.edu/research/publications/working-papers.php>

**06-01-003**

Exact Elliptic Compactons in Generalized Korteweg-DeVries Equations

*Fred Cooper, Avinash Khare, and Avadh Saxena*

**06-01-002**

Supersymmetric Approximations to the 3D Supersymmetric O(N) Model

*John F. Dawson, Bogdan Mihaila, Per Berglund, and Fred Cooper*

**06-01-001**

Non-perturbative Gluon Pair Production

*Fred Cooper and Gouranga Nayak*

## REFEREED LITERATURE

<http://www.santafe.edu/events/update/publications.php>

**Kossinets, G., and D. J. Watts.** "Empirical Analysis of an Evolving Social Network." *Science* 311(5757) (2006): 88-90.

**Queiros, S. M. D., and C. Tsallis.** "On the Connection between Financial Processes with Stochastic Volatility and Nonextensive Statistical Mechanics." *European Physical Journal B* 48(1) (2005): 139-148.

**Chao, D. L., M. P. Davenport, S. Forrest, and A. S. Perelson.** "The Effects of Thymic Selection on the Range of T Cell Cross-Reactivity." *European Journal of Immunology* 35(12) (2005): 3452-3459.

## LIBRARY ACQUISITIONS

For a list of recent purchases by the SFI library, please see <http://www.santafe.edu/events/update/library.php>

## CALENDAR OF EVENTS

<http://www.santafe.edu/events/calendar.php>

**February 8-10**

Workshop — General Patterns of Migration, organized by **Ilia Peiros**

**February 9-11, 2006**

Workshop — Foundations of Cooperation in the Commons, organized by **Shannon Larsen** (SFI), held at Universidad de Los Andes, Bogota, Colombia

**February 17-18**

Working Group — Inequality and Social Interactions, organized by **Samuel Bowles**

**March 17 - 18**

Workshop — Roadmap for CAS Science Education, organized by **Ginger Richardson** (SFI)

**April 3 - 5, 2006**

Workshop — Degeneracy and Complexity in the Immune System, organized by **Eli Sercarz** (Torrey Pines Institute) and **Alan Perelson** (LANL & SFI)

## FEBRUARY VISITORS AND ARRIVALS

<http://www.santafe.edu/events/monthlyvisitors.php>

**Elhanan Borenstein** (2/4-11), School of Computer Science, Tel-Aviv University

**Jung-Kyoo Choi** (2/1-22), School of Economics and Trade, Kyungpook National University

**Anna Dybo** (2/16-3/20), Institute of Linguistics, Russian Academy of Science

**Attila Egri-Nagy** (2/18-22), Computer Science, University of Hertfordshire STRI.

**Doug Erwin** (2/7-12), National Museum of Natural History, Smithsonian Institution

**Dave Feldman** (2/12-3/4), Department of Physics,  
College of the Atlantic

**Emily Gamber** (2/8-10) Mathematics, The University  
of North Carolina at Chapel Hill

**Michael Hochberg** (2/19-28), Institut des Sciences  
de l'Evolution (CNRS - UMR 5554), Université  
Montpellier II

**Daniel Hruschka** (2/13-15), Anthropology, Emory  
University

**Tim Kohler** (2/9-13), Department of Anthropology,  
Washington State University

**Lori Marino** (2/5-11), Neuroscience & Behavioral  
Biology, Emory University

**Brenda McCowan** (2/5-11), VMTRC, University of  
California-Davis

**Daniel Merl** (2/22-23), Applied Math and Statistics,  
University of California, Santa Cruz

**Suresh Naidu** (2/13-23), Department of Economics,  
University of California/Berkeley.

**Rafael Núñez** (2/27-3/3), Department of Cognitive  
Science, University of California, San Diego

**Karen Page** (2/11-4/8), Computer Science/  
Bioinformatics Group, University College London

**Sohini Ramachandran** (2/5-11), Biological Sciences,  
Stanford University

**Sander van Doorn** (2/2-3), Theoretical Biology,  
University of Groningen, Center for Ecological and  
Evolutionary Studies

**Donghao Zhou** (2/27-3/20), Department of  
Endocrinology, Linyi City Chinese Medicine Hospital

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