



SANTA FE INSTITUTE

Santa Fe Institute Resident Research Faculty

Santa Fe Institute

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Tanmoy Bhattacharya, Professor, SFI • TSM, Los Alamos National Laboratory, T-8

Evolution of Viruses and Host-Virus Interactions • Phylogenetic Methods and their Applications • Rational Design of Vaccines • Observed Quantum Systems

Sam Bowles, Professor, SFI • Professor Economics, University of Siena

Evolution of Human Cooperation • Dynamics of Economic Inequality Behavioral • Institutional Innovation • Other-Regarding Motives

George Cowan, Lifetime Trustee Emeritus, Distinguished Fellow, Founding President, SFI

Early Childhood Development

Jennifer A. Dunne, Research Fellow, SFI • Co-Director, Pacific Ecoinformatics and Computational Ecology

Lab Ecology • Networks • Paleobiology • Coupled Human-Natural Systems • Ecoinformatics

Douglas H. Erwin, Professor, SFI • Senior Scientist and Curator, Smithsonian National Museum of Natural

History, Dept. of Paleobiology

Paleobiology • Evolutionary Innovation • Evolution of Development

J. Doyne Farmer, Professor, Science Steering Committee, SFI

Social evolution • Financial markets • Evolution of technology

Jessica Flack, Research Fellow, SFI

Evolutionary Construction (robustness, innovation, construction principles, conflict & conflict management, evolution of signaling systems, network coding, drivers of social complexity, evolution of structure)

[Murray Gell-Mann](#), *Distinguished Fellow and Trustee, SFI*

Scaling Phenomena • Measures of Simplicity and Complexity • Quantum Mechanics and the Quasi-Classical World

[Bette Korber](#), *Visiting Researcher, External Faculty, Science Steering Committee, SFI • Theoretical Division, Los Alamos National Laboratory*

Immunology • Theoretical Biology • Biophysics

[David Krakauer](#), *Professor, Science Steering Committee, SFI*

Evolution • Signaling • Information and Computation • Microbes

[John H. Miller](#), *Professor, SFI • Professor of Economics and Social Sciences and Head, Carnegie Mellon University, Department of Social and Decision Sciences*

Complex Adaptive Social Systems

[Cristopher Moore](#), *Professor, SFI • University of New Mexico, Computer Science/Physics and Astronomy*

Phase transitions in NP-complete problems • Quantum computation and quantum algorithms • Models and structural inference in social networks

[D. Eric Smith](#), *Professor, SFI*

Physical and Chemical Self-Organization • Origin of Life • Money, Markets, and Institutions • Biomolecular Information and Evolvability

[Geoffrey West](#), *President and Distinguished Professor, SFI*

Universal Scaling Laws in Biology • Fundamental Laws in Biology

[Jon Wilkins](#), *Professor, SFI*

Evolutionary Genetics • Genetic Conflict and Coevolution • Human Demographic History

[Chris Wood](#), *Vice President, SFI*

Brain Imaging and Modeling • Computational Neuroscience • Biological Computation

[Libby Wood](#), *Professor, SFI • Yale University*

Civil Wars • Political Violence • Negotiated Settlements • Collective Action

[Cormac McCarthy](#), *SFI Fellow, SFI*