



**The Principles of Complexity: Life, Scale, and Civilization**

**July 31, August 1, 2, 2013  
Santa Fe Institute**

**Agenda**

**Wednesday July 31, 2013**

- 5.45pm**                    **Reception, Hotel Santa Fe**  
**7.00**                        *Shuttle to the James A. Little Theater*
- 7.30**                        **Dr. Michael Crow** *President Arizona State University*  
"New Problems, New Partnerships: What Tomorrow's University Must Be"  
**James A. Little Theater, 1060 Cerrillos Road, Santa Fe**
- 9.00**                        *Shuttle from James A. Little Theater to Hotel Santa Fe*

**Thursday, August 1, 2013**

**Workshop DAY 1**

**SANTA FE INSTITUTE  
Robert Noyce Conference Room**

- 8.15am**                    *Shuttle from Hotel Santa Fe to Santa Fe Institute*
- 8.30**                        **BREAKFAST**
- 9.00**                        **Jerry Sabloff** *Santa Fe Institute*  
Welcome and opening remarks
- 9.10 – 10.40**            **Jerry Sabloff** *Santa Fe Institute*  
Group Introduction
- Laura Fortunato and Hannah DeRose-Wilson**  
*Santa Fe Institute*  
"What is Social Complexity, Anyway?"
- Paula Sabloff** *Santa Fe Institute*  
"Comparative Analysis of State Formation"  
"Comparative Analysis of State Hierarchies"
- Scott Ortman**  
*Santa Fe Institute, Crow Canyon Archaeological Center*  
"Urban Scaling in the Ancient World: Evidence from Pre-Hispanic Central Mexico"

**Eric Rupley** *Santa Fe Institute*

“Structural and Dynamic Foundations for the Initial Emergence of the State”

**Karl La Favre** *Santa Fe Institute /University of California, LA*

“Settlement Patterns of Ancient Titicaca, Perú and Bolivia: The Beginning of a Synthesis”

**10.40**

**COFFEE BREAK**

**11.00 – 12.30**

**Geoffrey West and Luis Bettencourt** *Santa Fe Institute*

Group Introduction

**Clio Andris** *Santa Fe Institute*

“Regularities and Patterns in the US Inter-urban Migration System”

**Yaoli Wang** *University of Georgia-Athens*

“Spatializing Social Networks in an Urban Context”

**Marcus Hamilton** *Santa Fe Institute*

“Scaling the Size and Dynamics of Publicly-traded Firms and Markets”

**Madeleine Daepf** *Washington University-St Louis*

“The Lifespan of Publicly Traded Companies”

**Chris Kempes** *California Institute of Technology/NASA*

“Predicting Detailed Forest Structure from General Scaling Laws and Local Resource Limitations”

**12.30**

**LUNCH**

**1.30 – 3.00**

**Jessica Flack**

*University of Wisconsin - Madison,*

*The Center for Complexity & Collective Computation (C4)*

Group Introduction Part 1

**Eddie Lee** *University of Wisconsin - Madison, (C4)*

“Regularities of Macroscopic Observables”

**Eleanor Brush** *University of Wisconsin - Madison, (C4)*

“Consensus Formation as a Mechanism for Producing New Temporal and Spatial Scales”

**Philip Poon** *University of Wisconsin - Madison, (C4)*  
“Niche Construction and Macroscopic Tuning via Adaptive Learning Rules”

**David Krakauer** *University of Wisconsin - Madison, (C4)*  
Group Introduction Part 2

**Chris Ellison** *University of Wisconsin - Madison, (C4)*  
“Inferential Evolution and the Complexity of Life”

**Bryan Daniels** *University of Wisconsin - Madison, (C4)*  
“Criticality and Information Flow in an Adaptive System”

**Evandro Ferrada** *Santa Fe Institute*  
“The Simon Modularity Principle”

**3.00**

**TEA**

**3.30 -4.30**

**Melanie Mitchell** *Portland State University*  
Group Introduction

**David Feldman** *College of the Atlantic*  
“A Massive Open Online Course (MOOC) on Dynamics and Chaos”

**John Driscoll** *Portland State University*  
“Fractals, Biological Scaling and Urban Scaling”

**4.30**

**Recap of the day**

**5.30**

**Cocktails**

**6.00**

**Dinner at Santa Fe Institute**

**7.30 and 8.00**

*Shuttle will leave for Hotel Santa Fe*

**Friday, August 2, 2013**  
**Workshop DAY 2**

**SANTA FE INSTITUTE**  
**Robert Noyce Conference Room**

- 8.15** *Shuttle from Hotel Santa Fe to Santa Fe Institute*
- 8.30** **BREAKFAST**
- 9.00** **Geoffrey West**  
Introduction and Recap
- 9.05** **Krakauer/Flack Group Discussion**  
Moderated by Melanie Mitchell
- 10.30** **COFFEE BREAK**
- 10.45** **Sabloff Group Discussion**  
Moderated by Luis Bettencourt
- 12.15** **LUNCH**
- 1.15** **West/Bettencourt Group Discussion**  
Moderated by David Krakauer
- 2.45** **TEA**
- 3.15** **Richardson/Mitchell Group Discussion**  
Moderated by Jerry Sabloff
- 4.45** **Luis Bettencourt**  
Synthetic Remarks
- 4.55** **Jerry Sabloff**  
Closing Remarks
- 5.00** *Shuttle will leave for Hotel Santa Fe*