

AGENT 2002

SOCIAL AGENTS: ECOLOGY, EXCHANGE & EVOLUTION

Sponsored by the University of Chicago and Argonne National Laboratory.



Repast Tutorial: October 8-9, 2002 University of Chicago Main Campus
Methods, Toolkits, and Techniques Day: October 10, 2002 Gleacher Center, Chicago, IL
Conference: October 11-12, 2002 Gleacher Center, Chicago, IL

There is No Charge for the Events

Please Note that Each of the Events Requires Separate Registration

Please Visit the Conference Website for Details:

<http://www.agent2002.anl.gov/>

Tuesday, October 8, 2002

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| 8:30 – 8:45 a.m. | <i>Repast Tutorial Welcome</i>
David Sallach, University of Chicago |
| 8:45 – 10:00 a.m. | Overview of Repast and Agent Simulation
Tom Howe, University of Chicago |
| 10:30 – Noon | Repast Harvard Tutorial Step 1
Michael North, Argonne National Laboratory |
| 1:30 – 3:00 p.m. | Repast Harvard Tutorial Step 2
Michael North, Argonne National Laboratory |
| 3:30 – 5:30 p.m. | Repast Scheduling
Nick Collier, University of Chicago |

Wednesday, October 9, 2002

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| 8:30 – 10:00 a.m. | Repast GUI, GIS, and Prolog+CG Libraries
Tom Howe, University of Chicago |
| 10:15 – Noon | Repast Data Collection and Charting
Laszlo Gulyas, Harvard University/Loránd Eötvös University |
| 1:30 – 3:00 p.m. | Repast Social Network Support
Nick Collier, University of Chicago |
| 3:15 – 5:30 p.m. | Emerging Directions Including Attractor Systems and Situated Activity
David Sallach, University of Chicago |

Thursday, October 10, 2002

- 9:00 – 9:15 a.m.** *Methods, Toolkits, and Techniques Day Welcome*
Michael North, Argonne National Laboratory
- 9:15 – 10:30 a.m.** **Swarm**
Roger Burkhart, John Deere
- 10:45 – Noon** **NetLogo**
Uri Wilensky, Northwestern University
- 12:30 – 1:00 p.m.** **Lunchtime NetLogo Collaboration Demonstration**
Uri Wilensky, Northwestern University
- 1:00 – 2:15 p.m.** **Ascape**
Miles Parker, Bios Group
- 2:30 – 3:45 p.m.** **Repast**
Nick Collier, University of Chicago
Tom Howe, University of Chicago
- 3:45 – 5:15 p.m.** **Design & Methods**
Moderator & Discussant: Michael North, Argonne National Laboratory
- Understanding the Difference that Space Can Make:
Toward a Geographical Agent Modeling Environment*
David O'Sullivan, Pennsylvania State University
- Modeling Mental Behaviours of Social Agents in Simulated Traffic World*
N. Paramesh, University of New South Wales
- Situated Social Ecology: An Integrated Design Hermeneutic*
David L. Sallach, University of Chicago
- 5:15 – 5:45 p.m.** **Methods, Toolkits, and Techniques**
Moderator: Michael North, Argonne National Laboratory
Panel: Nick Collier, University of Chicago
Laszlo Gulyas, Harvard University/Loránd Eötvös University
Uri Wilensky, Northwestern University
Roger Burkhart, John Deere

Friday, October 11, 2002

8:30 – 8:45 a.m.

Welcome

Thomas Wolsko, Argonne National Laboratory

8:45 – 9:45 a.m.

Varieties of Emergence in Social Simulation

Nigel Gilbert, University of Surrey

Moderator & Discussant: R. Keith Sawyer, Washington University

10:00 – Noon

Adaptation and Networks

Moderator & Discussant: Michael Heaney, University of Chicago

The Empirical Content of Deterministic Models of Adaptation

Jonathan Bendor, Stanford University

Daniel Diermeier, Northwestern University

Michael Ting, University of North Carolina

Distribution and Efficiency for Non-Walrasian Search Technologies in a Trading Model with a Choice to Renege: A Network-Theoretic Approach

Nobuyuki Hanaki & Alexander Peterhansl, Columbia University

Endogenous Network Formation and the Evolution of Preferences

Alina Lazar, Wayne State University

David Chavalarias, Ecole Polytechnique

T. K. Ahn, Workshop in Political Theory and Policy Analysis, Indiana University

1:30 – 2:30 p.m.

Simulating Society: The Tension between Transparency and Veridicality

Kathleen Carley, Carnegie-Mellon University

Moderator & Discussant:

2:45 – 5:30 p.m.

Ecological Simulation

Moderator & Discussant: Pamela Sydelko, Argonne National Laboratory

Towards a Fair Distribution of Losses: Simulation of a Flood Scenario

Lisa Brouwers and Harko Verhagen, Stockholm University and KTH

Empirical Foundations for Agent Based Modeling: How Do Institutions Affect Agents' Land Use Decisions in Indiana?

Tun Myint, Laura Carlson, Marco Janssen, Elinor Ostrom & Abigail York, Indiana University

The Complex Interaction of Agents and Environments: An Example in Urban Sprawl

William Rand, Scott E. Page, Rick Riolo & Daniel G. Brown, University of Michigan

An Agent-Based Model for the Spatial Mobility of Timber Industry in Brazilian Amazonia

Sérgio L. M. Rivero, Federal University of Rodônia

Adam Hirsch, Luiz Solórzano and Daniel C. Nepstad, Woods Hole Research Center

Saturday, October 12, 2002

8:45 – 9:45 a.m.

Computational Models of Social Forms: Advancing Generative Theory

Lars-Erik Cederman Harvard University

Moderator & Discussant: Alexander Wendt, University of Chicago

10:00 – Noon

Electricity Applications

Moderator & Discussant: Randy Picker, University of Chicago

Simulating Energy Markets and Infrastructure Interdependencies with Agent-Based Models

Charles M. Macal & Michael J. North, Argonne National Laboratory

Multiagent Modeling of Electricity Markets

Michael North, Charles Macal, Richard Cirillo, Guenter Conzelmann, Vladimir Koritarov, Prakash

Thimmapuram & Thomas Veselka, Argonne National Laboratory

Valuation of Electricity Companies in Evolutionary Oligopolistic Markets

Fernando Oliveira & Derek Bunn, London Business School

1:30 – 3:30

MacroEvolution

Moderator & Discussant: John Padgett, University of Chicago

The Impact of Resource Allocation Strategies on Hunter-Gatherer Group Survival

Steven J. Goodhall, Compuware Corporation and Wayne State University

Robert G. Reynolds, Wayne State University

Robert Whallon, University of Michigan

Agent-based Simulation of the Evolution of Archaic States

Robert G. Reynolds & Alina Lazar, Wayne State University

A Landscape Model of Closed Political Regimes

Rick Riolo, Ravi Bhavnani & David Backer, University of Michigan

3:45 – 4:45 p.m.

The Difference of Difference: Diversity and Agent Based Models

Scott Page, University of Michigan

Moderator & Discussant: Charles Macal, Argonne National Laboratory

4:45 – 5:30

Closing Panel

Moderator & Discussant: Charles Macal, Argonne National Laboratory

Panel: Sean Gailmard, University of Chicago

Michael North, Argonne National Laboratory

Fabio Rojas, University of Chicago