

# 2008 AAAI Fall Symposium on Automated Scientific Discovery

Andrew Shilliday & Selmer Bringsjord, Chairs

## Schedule as of November 6, 2008

### Day 1 - Friday, November 7. *9:00 am - 5:30 pm*

**9:00 am - 9:15 am** Opening Remarks by Andrew Shilliday and Selmer Bringsjord

**9:15 am - 10:15 am** Keynote address by Doug Lenat – “Looking Both Ways”

**10:15 am - 10:25 am** Commentary

**10:25 am - 10:40 am** Open Q & A / Discussion

**10:40 am - 11:00 am** Break

**11:00 am - 11:40 pm** Andrew Shilliday - “Historical Overview of Automated Scientific Discovery systems”

**11:40 am - 12:00 am** Discussion

**12:00 pm - 2:00 pm** Lunch

**2:00 pm - 3:30 pm** Session

**2:00 pm - 2:45 pm** Alexandre Linhares and Eric Nichols - “Automated Scientific Discovery and Hofstadter's Fluid Concepts Model”

**2:45 pm - 3:30 pm** Siemion Fajtlowicz - “Graffiti's vs. Human Conjectures in Chemistry and Mathematics”

**3:30 pm - 4:00 pm** Break

**4:00 pm - 5:30 pm** Session

**4:00 am - 4:45 am** Jean-Gabriel Ganascia - “A Reconstruction of Some of Claude Bernards Scientific Steps”

**4:45 am - 5:30 pm** Susan Epstein - “Knowledge Representation in Automated Scientific Discovery”

**6:00 pm - 7:00 pm** Reception

**Day 2 - Saturday, November 8. 9:00 am - 5:30 pm**

**9:00 am - 10:30 am** Keynote Address by Alan Bundy. “Why Ontology Evolution is Essential in Modelling Scientific Discovery”

**10:00 am - 10:10 am** Commentary

**10:10 am - 10:30 am** Open Q & A / Discussion

**10:30 am - 11:00 am** Break

**11:00 am - 12:30 pm** Session

**11:00 am - 11:45 am** David Jensen and Andrew Fast and Brian Taylor and Marc Maier - “Automatic Identification of Quasi-Experimental Designs for Discovering Causal Knowledge”

**11:45 pm - 12:30 pm** Konstantine Arkoudas - “Automatically Discovering Euler’s Identity via Genetic Programming”

**12:30 pm - 2:00 pm** Lunch

**2:00 pm - 3:30 pm** Session

**2:00 am - 2:45 pm** Michael Chan and Alan Bundy - “Inconstancy: An Ontology Repair Plan for Adding Hidden Variables”

**2:45 pm - 3:30 pm** Selmer Bringsjord - “On Automatic Discovery of Gödel’s Incompleteness Theorem”

**3:30 pm - 4:00 pm** Break

**4:00 pm - 4:45 pm** Joshua Taylor - “Discovery using Heterogeneous Combined Logics”

**4:45 pm - 5:30 pm** Panel discussion on current state of automated scientific discovery

Participants:

- Susan Epstein, Hunter College, New York, NY
- Jean-Gabriel Ganascia, University Pierre et Marie Curie, Paris, France
- Konstantine Arkoudas, Rensselaer Polytechnic Institute, Troy, NY
- TBD

**6:00 pm - 7:00 pm** Reception

**Day 3 - Sunday, November 9. 9:00 am - 12:30 pm**

**9:00 am - 10:00 am** Keynote address by Simon Colton. “Joined-Up Reasoning for Automated Scientific Discovery A Position Statement and Research Agenda”

**10:00 am - 10:10 am** Commentary

**10:10 am - 10:30 am** Open Q & A

**10:30 am - 11:00 am** Break

**11:00 am - 12:30 pm** Group discussion about next steps, journal articles, strategies going forward, grants, etc.