

# Call for Papers

## FOIS-2004

### International Conference on Formal Ontology in Information Systems

<http://www.fois.org>



Picture courtesy of Fototeca Web del Comune di Torino

**November 4-6, 2004, Torino (Italy)**

Just as ontology developed over the centuries as part of philosophy, so in recent years ontology has become intertwined with the development of the information sciences. Researchers in such areas as artificial intelligence, formal and computational linguistics, biomedical informatics, conceptual modeling, knowledge engineering and information retrieval have come to realize that a solid foundation for their research calls for serious work in ontology, understood as a general theory of the types of entities and relations that make up their respective domains of inquiry. In all these areas, attention has started to focus on the *content* of information rather than on just the formats and languages in terms of which information is represented. The clearest example of this development is provided by the many initiatives growing up around the project of the Semantic Web. And as the need for integrating research in these different fields arises, so does the realization that strong principles for building well-founded ontologies might provide significant advantages over ad hoc, case-based solutions. The tools of Formal Ontology address precisely these needs, but a real effort is required in order to apply such philosophical tools to the domain of Information Systems. Reciprocally, research in the information science raises specific ontological questions which call for further philosophical investigations. The purpose of FOIS is to provide a forum for genuine interdisciplinary exchange in the spirit of a unified ontological analysis effort. Although the primary focus of the conference is on theoretical issues, methodological proposals as well as papers dealing with concrete applications from a well-founded theoretical perspective are welcome.

---

#### Invited Speakers

Peter Gärdenfors, Lund University Cognitive Science, Sweden

Amie Thomasson, Department of Philosophy, University of Miami, USA

---

#### Deadlines and Further Information

**Abstracts submissions May 3, 2004**

**Paper submissions May 7, 2004**

Acceptance Notification: June 25, 2004

Submission of camera-ready paper: July 30, 2004

Proceedings will be published by IOS Press and available at the conference.

Submission is a two-step procedure: first abstracts, then full papers. Submitted papers must not exceed 5000 words (including bibliography). Abstracts should be less than 300 words. Electronic submission via the website is strongly preferred; if unavailable, submission via email or postal mail is possible. For details see: <http://www.fois.org>.

---

#### Conference Chair

Nicola Guarino (ISTC-CNR, Trento, Italy)  
[nicola.guarino@loa-cnr.it](mailto:nicola.guarino@loa-cnr.it)

#### Program Chairs

Achille Varzi (Columbia University, New York, USA)  
[achille.varzi@columbia.edu](mailto:achille.varzi@columbia.edu)  
Laure Vieu (IRIT-CNRS, Toulouse, France)  
[laure.vieu@irit.fr](mailto:laure.vieu@irit.fr)

#### Local Chairs

Maurizio Ferraris (University of Torino, Italy)  
[ferraris@cisi.unito.it](mailto:ferraris@cisi.unito.it)  
Leonardo Lesmo (University of Torino, Italy)  
[lesmo@di.unito.it](mailto:lesmo@di.unito.it)

#### Publicity Chair

Jos Lehmann (ISTC-CNR, Rome, Italy)  
[joslehmann@www.ip.rm.cnr.it](mailto:joslehmann@www.ip.rm.cnr.it)

## Topics

We seek high-quality papers on a wide range of topics. While authors may focus on fairly narrow and specific issues, all papers should emphasize the relevance of the work described to formal ontology and to information systems. Papers that completely ignore one or the other of these aspects will be considered as lying outside the scope of the meeting. Topic areas of particular interest to the conference are:

### Foundational Issues

- Kinds of entity: particulars vs. universals, continuants vs. occurrents, abstracta vs. concreta, dependent vs. independent, natural vs. artificial
- Formal relations: parthood, identity, connection, dependence, constitution, subsumption, instantiation
- Vagueness and granularity
- Identity and change
- Formal comparison among ontologies
- Ontology of physical reality (matter, space, time, motion, ...)
- Ontology of biological reality (genes, proteins, cells, organisms, ...)
- Ontology of mental reality and agency (beliefs, intentions and other mental attitudes; emotions, ...)
- Ontology of social reality (institutions, organizations, norms, social relationships, artistic expressions, ...)
- Ontology of the information society (information, communication, meaning negotiation, ...)
- Ontology and Natural Language Semantics, Ontology and Cognition

### Methodologies and Applications

- Top-level vs. application ontologies
- Ontology integration and alignment; role of reference ontologies
- Ontology-driven information systems design
- Requirements engineering
- Knowledge engineering
- Knowledge management and organization
- Knowledge representation; Qualitative modeling
- Computational lexica; Terminology
- Information retrieval; Question-answering
- Semantic web; Web services; Grid computing
- Domain-specific ontologies, especially for: Linguistics, Geography, Law, Library science, Biomedical science, E-business, Enterprise integration, ...

---

## Programme Committee

**Bill Andersen**, OntologyWorks, USA

**Nicholas Asher**, Dept of Philosophy, University of Texas at Austin, USA

**Nathalie Aussenac-Gilles**, Research Institute for Computer Science, CNRS, Toulouse, France

**John Bateman**, Dept of Applied English Linguistics, University of Bremen, Germany

**Brandon Bennett**, Division of Artificial Intelligence, University of Leeds, UK

**Andrea Bottani**, Dept of Philosophy, University of Bergamo, Italy

**Joost Breuker**, Dept of Computer Science & Law, University of Amsterdam, The Netherlands

**Roberto Casati**, Jean Nicod Institute, CNRS, Paris, France

**Werner Ceusters**, Language & Computing, Belgium

**Tony Cohn**, Division of Artificial Intelligence, University of Leeds, UK

**Robert Colomb**, School of Computer Science and Electrical Engineering, University of Queensland, Australia

**Ernest Davis**, Dept of Computer Science, New York University, USA

**Martin Dörr**, Institute of Computer Science, FORTH, Heraklion, Greece

**Carola Eschenbach**, Dept for Informatics, University of Hamburg, Germany

**Jérôme Euzenat**, INRIA Rhône-Alpes, Grenoble, France

**Christiane Fellbaum**, Cognitive Science Laboratory, Princeton University, USA & Berlin Brandenburg Academy of Sciences and Humanities, Berlin, Germany

**Maurizio Ferraris**, Dept of Philosophy, University of Torino, Italy

**Antony Galton**, School of Engineering and Computer Science, University of Exeter, UK

**Aldo Gangemi**, Institute of Cognitive Sciences and Technologies, CNR, Rome, Italy

**Peter Gärdenfors**, Lund University Cognitive Science, Sweden

**Pierdaniele Giaretta**, Dept of Philosophy, University of Padova, Italy

**Michael Gruninger**, Institute for Systems Research, University of Maryland College Park, USA & National Institute for Standards and Technology, USA

**Nicola Guarino**, Institute of Cognitive Sciences and Technologies, CNR, Trento, Italy

**Patrick J. Hayes**, Institute for Human and Machine Cognition, University of West Florida, USA

**Heinrich Herre**, Institute of Informatics, University of Leipzig, Germany

**Jacques Jayez**, ENS-Humanities, Lyon, France

**Ingvar Johansson**, Institute for Formal Ontology and Medical Information Science, University of Leipzig, Germany

**Hannu Kangassalo**, Dept of Computer and Information Sciences, University of Tampere, Finland

**Fritz Lehmann**, USA

**Leonardo Lesmo**, Dept of Computer Science, University of Torino, Italy

**Bernardo Magnini**, Centre for Scientific and Technological Research, ITC, Trento, Italy

**David Mark**, Dept of Geography, State University of New York, Buffalo, USA

**William E. McCarthy**, Department of Accounting, Michigan State University, USA

**Robert Meersman**, Dept of Computer Science, Free University of Brussels, Belgium

**Chris Menzel**, Dept of Philosophy, Texas A&M University, USA

**Friederike Moltmann**, Dept of Philosophy, Stirling University, UK  
**Philippe Muller**, Research Institute for Computer Science, University of Toulouse III, France

**John Mylopoulos**, Dept of Computer Science, University of Toronto, Canada

**Leo Obrst**, MITRE, USA

**Massimo Poesio**, Dept of Computer Science, University of Essex, UK

**Ian Pratt-Hartmann**, Dept of Computer Science, University of Manchester, UK

**James Pustejovsky**, Dept of Computer Science, Brandeis University, USA

**Steffen Schulze-Kremer**, German Resource Center for Genome Research, Berlin, Germany

**Peter Simons**, School of Philosophy, University of Leeds, UK

**Barry Smith**, Dept of Philosophy, State University of New York, Buffalo, USA & Institute for Formal Ontology and Medical Information Science, University of Leipzig, Germany

**John Sowa**, USA

**Veda Storey**, Dept of Computer Information Systems, Georgia State University, USA

**Mike Uschold**, The Boeing Company, USA

**Achille Varzi**, Dept of Philosophy, Columbia University, USA

**Laure Vieu**, Research Institute for Computer Science, CNRS, Toulouse, France

**Yair Wand**, Management Information Systems Division, University of British Columbia, Vancouver, Canada

**Chris Welty**, IBM Watson Research Center, USA

**Roel Wieringa**, Computer Science Department, University of Twente, The Netherlands