Workshops, June 1st

Workshop 1: 1st International Workshop on the Semantic Sensor Web (SemSensWeb 2009)
Workshop 2: Trust and Privacy on the Social and Semantic Web (SPOT2009)
Workshop 3: 4th Workshop on Semantic Wikis (SemWiki2009)
Workshop 4: Workshop on Inductive Reasoning and Machine Learning on the Semantic Web (IRMLeS2009)
Workshop 5: 4th International Workshop on Semantic Business Process Management (SBPM2009)
Workshop 6: Workshop on Context, Information And Ontologies (CIAO2009)

Workshops, May 31st

Workshop 7: 5th Workshop on Scripting and Development for the Semantic Web (SFSW2009)
Workshop 8: 1st International Workshop on Stream Reasoning (SR2009)

Workshop 4: Workshop on Inductive Reasoning and Machine Learning on the Semantic Web (IRMLeS2009)   (Full day)

The goal of the Semantic Web research is to extend the current World Wide Web into the one where information is given semantically precise meaning. The Semantic Web is supposed to provide a medium to share such information and is often perceived to be a global, distributed database of meaningfully represented data. From the speed of the development of the initiatives like Linking Open Data or community efforts to integrate various ontological resources like bio-ontologies we may expect to have, in the near future, an access to enormous data resource. Hence, the problem of mining from the Semantic Web currently becomes as important as it used to be the data mining from local databases. Exploiting this global resource of data requires new kinds of approaches for data mining and data analysis that would be able to deal with the complexity and expressivity of the representation languages and novel assumptions that underlie reasoning services within the Semantic Web. Open, distributed and inherently incomplete nature of the Semantic Web environment posses problems for deductive approaches, traditionally employed to reason with logic-based ontological data. Hence, one may witness a recent trend in the Semantic Web community to propose complementary forms of reasoning, preferably more efficient and noise-tolerant. Promising and already successful approach is the use of inductive and statistical methods as complement to deductive one

(for example by adding data mining support to SPARQL query evaluation). It is especially valid when data comes from distributed sources and may be inconsistent. This workshop puts special attention on the problem of ontology mining and inductive and statistical approximate reasoning. How machine learning techniques, such as statistical learning methods and inductive forms of reasoning, can work directly on the richly structured Semantic Web data and exploit the Semantic Web technologies will be analyzed and the value added of
machine learning methods for the Semantic Web context will be discussed. The focus of the workshop covers the following main topics from the general scope of the conference: machine learning methods for Semantic Web Data and Ontologies (especially ontology learning, creation, evolution, querying and mapping); Applications on the Semantic Web (data mining). Moreover, it addresses the needs for new forms of reasoning on the Semantic Web that would complement, traditionally studied in this context, deductive ones. The workshop is meant to be a forum for scientific exchange amongst researchers interested in an interdisciplinary research on the intersection of the Semantic Web with Knowledge Discovery and Machine Learning fields. It is meant to act as a meeting point for the sub-communities from these fields that are interested in research on the challenging problems of such intersection.
Homepage: http://irmles2009.di.uniba.it/