

**Prof. Francesco M. Donini**

**UNIVERSITA' DELLA TUSCIA – VITERBO**  
**Dipartimento di Scienze della Comunicazione**  
**Facoltà di Scienze Politiche**

### **Knowledge Representation Tools for Electronic Commerce**

The graft of Semantic Annotation into Electronic Commerce brings new opportunities for the application of Knowledge Representation techniques originally devised for Knowledge Bases.

In this talk, I tackle two phases of an Electronic Commerce transaction, namely matchmaking and negotiation, and argue that – in addition to standard Deductive Reasoning, and Decision Theory – some non-standard forms of reasoning are present when accomplishing matchmaking and negotiation: Abduction, Belief Revision, Preference-based reasoning. However, the use of these forms of reasoning is not the same as their use in Knowledge Bases. I point out the changes that are needed, and sketch open problems and possible lines of research.