A Pattern Science for the Semantic Web

I will present the current state of play with respect to collecting, finding, classifying, and using (design) patterns on the semantic web. The talk will compare historically related work, highlight some successful stories and curious unexpected bottlenecks, and will envision some charming research and development directions from the Web of Data.

Aldo Gangemi graduated in philosophy, and then worked in medical informatics, knowledge engineering, and semantic technologies, including the Semantic Web. He's senior researcher at the CNR Institute of Cognitive Sciences and Technology in Rome, and head of the Semantic Technology Lab. He also co-founded the Laboratory for Applied Ontology. His work on ontology engineering dates back to 1992, when pioneering the application of ontologies to knowledge organization systems in biomedicine. His current research focuses on pattern-based ontology design, semantic social networks, collaborative modeling, hybridation of NLP, lexical and semantic resources, and metamodels for heterogeneous knowledge integration. He has published more than 100 refereed articles in proceedings of international conferences, journals, and books, and has been involved in several projects funded by the European Union, governmental organizations, and industrial companies (either as research partner or consultant). STLab is responsible for CNR in the EU projects NeOn, IKS, and BONy, and has worked in the seminal ontology-related projects Galen, WonderWeb, OntoWeb, Metokis, and the Eureka project IKF. He has organized several conferences and workshops, and regularly tutors in PhD courses and international schools. Notable research products include the DOLCE ontology, its OWL versions and extensions within the DnS paradigm, e.g. DOLCE+DnS Ultralite, the Ontology Design Patterns (ODP) portal, the Semantic Scout for CNR researchers, etc. In legally-related fields, he has organized workshops on regulatory and legal ontologies, and has made active research on reusable components for legal ontology design, including the Core Legal Ontology. He is member of the advisory boards of ECDC and SEMIC.EU.