# 01RRDIU Semantic Web

**INTRODUCTION** 







#### The context



- Internet growth
  - Web site design, management, analysis, search, use are more and problematic
- Need for new semantic "functions" for information and knowledge processing
- Need for intelligent Web services capable of adapting to the users' needs and preferences

## Course objective

- Understand the "Semantic Web", the next generation of the Web
  - Ground and vision
  - Technological components
  - Applications
  - Challenges and future

# **Topics**

- Semantic Web: definitions and applications
- Resource Description Format (RDF) and RDF Schema
- Tools for RDF / Lab exercise
- Ontologies and OWL2
- Tools for OWL / Lab exercise
- Semantic Reasoning
- Semantic Queries
- Semantic Rules
- Tools for semantic queries and rules / Lab exercise

## Course material

- Available here
  - http://elite.polito.it ->Teaching -> Cuurent Courses -> 01RRDIU Semantic Web
- Slides, documents, references, ...

#### **Teachers**

- Fulvio Corno
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- Department of Computer Science and Control (DAUIN)

#### Schedule

- All classes will be in Room C (Aula C), with the following schedule:
  - **24/01/2017 10:00 12:00**
  - 31/01/2017 10:00 13:00
  - 03/02/2017 10:00 13:00
  - 06/02/2017 10:00 13:00
  - 10/02/2017 10:00 13:00
  - 13/02/2017 10:00 13:00
  - 20/02/2017 10:00 13:00
- Students are encouraged to attend the classes with their laptop, in order to work on the proposed exercises

#### Exam

 The exam will consist in the evaluation of two exercises proposed and developed during the class hours

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