

# 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 -> Current Courses -> 01RRDIU - Semantic Web
- Slides, documents, references, ...

# Teachers

- Fulvio Corno
  - [fulvio.corno@polito.it](mailto:fulvio.corno@polito.it)
- Laura Farinetti
  - [laura.farinetti@polito.it](mailto:laura.farinetti@polito.it)
- Luigi De Russis
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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:
  - 10/01/2019 10:00 - 12:00
  - 14/01/2019 14:30 - 17:30
  - 16/01/2019 10:00 - 13:00
  - 21/01/2019 10:00 - 13:00
  - 23/01/2019 10:00 - 13:00
  - 28/01/2019 10:00 - 13:00
  - 30/01/2019 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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