



## THE DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING AWARD SERIES FOR YOUNG TALENTED RESEARCHES

The Scientific Committee of the Department of Civil and Environmental Engineering has a long-standing tradition of organizing a variety of seminars/workshops keyed to the main research topics of the Department, CS3@DICA being the latest edition of these events. Within this context, the Department has recently promoted an award recognizing an outstanding poster contribution delivered by PhD candidates with the aim of acknowledging commitment of our early stage researchers to excel in a national and international scenario through favouring broad exposure of their research activity.

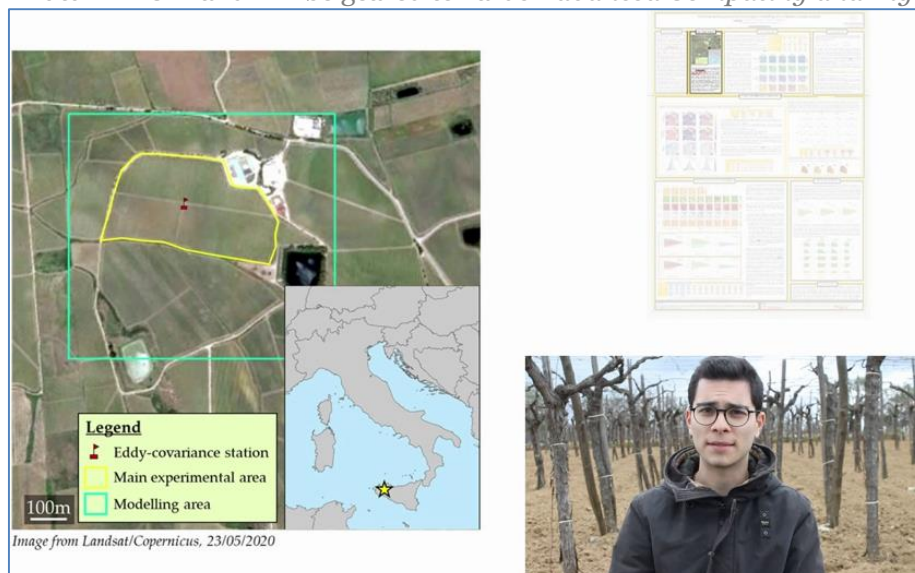
Poster evaluations are grounded on the consistency with the topic of the seminar/workshop, the originality of the content as well as communication effectiveness. Evaluations are provided by a Committee formed by the Director of the Department (Alberto Guadagnini), the Coordinator of the Scientific Committee (Paola Gattinoni), the main organizers of the seminar/workshop (Chiara Corbari and Stefano Mariani), and the Coordinators of the DICA Ph.D. programmes (Riccardo Barzaghi and Umberto Perego).

The winner is awarded the “Young Researchers Prize”: a total amount of 500 Euros is granted as a prize to contribute to APCs associated with an open access research paper.

The CS3@dica event on April 13th 2021 was focused on aspects and perspectives related to *Remote sensing for environmental monitoring*. Several PhD candidates took part to the selection, all of them with excellent quality posters and ensuing video presentations. All posters are available on the Department website ([www.dica.polimi.it/event/il-programma-completo-del-seminario-remote-sensing-data-for-environmental-monitoring-e-ora-online](http://www.dica.polimi.it/event/il-programma-completo-del-seminario-remote-sensing-data-for-environmental-monitoring-e-ora-online)) together with the associated video presentation.

The winner of the first edition of the award was Nicola Paciolla, PhD candidate in the PhD program in Environmental and Infrastructure Engineering. Nicola’s work (*Proximal-sensing-powered hydrological modelling of a vineyard: a scale analysis*) is focused on highlighting the benefits of the joint use of hydrological modelling and remote/proximal sensing at multiple scales of data aggregation to assist management of water resources targeting irrigation practices.

The broad and high quality participation to this first edition is encouraging for the future event, which will be held in Autumn 2021 and will be geared towards *Advanced Computing and Big Data*





## STARTING COURSES – PHD SCHOOL

### INDUSTRIAL SKILLS

**Prof. Biscari Paolo**

Develop and exploit in the young PhD students a system of skills development and innovation management in industrial and service companies.

From 4<sup>th</sup> to 19<sup>th</sup> May 2021



### LA COMUNICAZIONE NELLA SCIENZA

**Prof. Paganoni Anna Maria**

Obiettivo principale del corso è promuovere e diffondere la cultura scientifica in senso lato, enfatizzando il legame con altre discipline. In particolare ci avvaliamo della grande esperienza maturata presso il "Laboratorio di Formazione Matematica e di Sperimentazione Scientifica" (Dipartimento di Matematica - Politecnico) e della rafforzata collaborazione tra il Piccolo Teatro di Milano e il Politecnico.

From 1<sup>st</sup> May to 30<sup>th</sup> June 2021



### TECHNOLOGY & SOCIETY

**Prof. Crabu Stefano**

The mission of this course is to offer to Ph.D. students awareness of the societal and political impact of new emerging technologies. By adopting a "critical thinking" sensitivity, the course will develop practical skills able to face the challenges of everyday technological innovation activities. Moreover, the course will present actionable tools for the responsible management of the societal impact of technological research projects.

From 27<sup>th</sup> May to 28<sup>th</sup> June 2021



## STARTING COURSES – DOCTORAL PROGRAMMES

### PHD IN INFORMATION TECHNOLOGY

#### BLOCKCHAIN AND DISTRIBUTED LEDGER TECHNOLOGIES: PRINCIPLES, APPLICATIONS, AND RESEARCH CHALLENGES

**Prof. Francesco Bruschi**

The aim of the course is to introduce the technology, the functional innovations and the potential applications of blockchains and distributed ledger technologies.

From 3<sup>rd</sup> to 27<sup>th</sup> May 2021



#### FEEDBACK CONTROL IN FINANCE

**Prof. Simone Formentin**

The aim of the course is to show the potential of feedback control tools in financial engineering.

From 17<sup>th</sup> to 21<sup>st</sup> May 2021



#### PARALLEL COMPUTING ON TRADITIONAL (CORE-BASED) AND EMERGING GPU-BASED) ARCHITECTURES THROUGH OPENMP AND OPENACC / OPENCL

**Prof. Luca Oddone Breveglieri**

The course is dedicated to the techniques for high performance computing. It is aimed at experienced programmers (in some kind of sequential programming language), who wish to be introduced to the problems and solutions of parallel programming.

From 24<sup>th</sup> to 28<sup>th</sup> May 2021





## PHD IN MECHANICAL ENGINEERING

### DATA AND KNOWLEDGE IN PRODUCT DEVELOPMENT

**Prof. Giorgio Colombo (Politecnico di Milano), Dr. Stefano Borgo**

The course intends to provide basic knowledge on the methodologies for the representation in IT applications of the information and the engineering procedures related to the product development process. Contents: Product Development Process: data and processes. IT tools in product development and in industrial domain. Ontology: ontology as a conceptual artefact for information understanding and classification. Ontology for engineering. Ontology and contexts. Ontology of processes. Knowledge Based Engineering: parts, products and logical objects. Formal languages to model products and processes. Tools to develop Design Automation applications. Labs: Building an ontology with Protégé Object-Oriented design knowledge formalization & representation.

From 15<sup>th</sup> May to 26<sup>th</sup> May 2021



## OTHER NEWS



**POLITECNICO**  
MILANO 1863

### POLIMI SPRINGERBRIEFS - SPECIAL TOPICS IN INFORMATION TECHNOLOGY, 2021

The volume, published by Springer, contains short papers on the best PhD theses in Information Technology in 2020

Published in February 2021

