



CALLS AND EVENTS



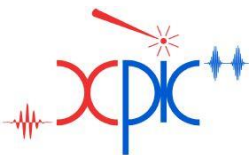
FULL PAPER SUBMISSION DEADLINE - IASDR 2023

The full paper submissions deadline is getting closer! Learn more about the 9 congress themes and find some inspiration on our site

March 28th, 2023



SEMINARS AND WORKSHOPS



WORKSHOP OF THE H2020 PROJECT “EXTREME ULTRAVIOLET TO SOFT-X-RAY PHOTONIC INTEGRATED CIRCUITS (X-PIC)”

Future applications of photonic devices in the EUV-to-soft X spectral region will be discussed by scientists and industrial researchers

March 23rd, 2023



STARTING COURSES – DOCTORAL PROGRAMMES

PHD IN INFORMATION TECHNOLOGY

ADVANCED TOPICS IN HARDWARE SECURITY

Prof. Luca Maria Cassano

Hardware security is the field of system security that deals with those menaces, threats, and attacks coming from the globally distributed nature of the modern supply chain of integrated circuits. This course will introduce the basic concepts related to security as well as the advanced concepts related to all the security issues coming from the hardware. Finally, the course will overview the existing counter-measures for all the previously presented attacks. The intended learning objective is for the student to acquire the methodological instruments to improve the security of a system with respect to the considered threat models.

From 6 March to 6th April 2023



LEARNING SPARSE REPRESENTATIONS FOR IMAGE AND SIGNAL MODELING

Prof. Giacomo Boracchi

The main goal of this course is to provide the student with an understanding of the most important aspects of the theory underlying sparse representation and, more in general, of sparsity as a form of regularization in learning problems. These methods have wide applicability in computer science, and represent a useful background for their research. Moreover, the course aims at giving a broad overview of the applications involving sparse representations.

From 1st March to 1st June 2023





PHOTONICS FOR INTERCONNECTION AND COMPUTING

Prof. Andrea Ivano Melloni

The course "Photonics for High-Performance Computing" covers two main themes: photonic interconnections and photonics computing. The course introduces the student to propagation and transmission in optical fibers and optical communication systems for interconnections in intra- and inter- datacenters. Fundamentals on photonic integrated circuits and silicon photonic technology, from the basic building blocks to complex programmable architectures are reviewed. Applications in computing are illustrated, with specific examples on photonic implementation of mathematical operations, neuromorphic photonic circuits, analog co-processors and reservoir computing for AI and quantum processing. The course concludes with a comprehensive overview of current state-of-the-art technology, the analysis of some case-studies and the discussion of the future vision of HPC in photonic roadmaps

From 14th March to 13th April 2023

