UNIVERSITÀ DEGLI STUDI DI TRIESTE

CONFERENCE ANNOUNCEMENT

On **WEDNESDAY MARCH 22nd 2023,**
At **16:00**, in the **SALA DEL CONSIGLIO (I floor)**
of the DEPARTMENT OF CHEMICAL AND PHARMACEUTICAL SCIENCES,
University of Trieste, Build. C11, Via Giorgieri 1

Professor ALEX RODRIGUEZ

University of Trieste, Department of Mathematics and Informatics
will give a conference entitled:

Introduction to Machine Learning for Chemists

The Department Director

Prof. Paolo Tecilla

Introduction to Machine Learning for Chemists

A. Rodriguez

University of Trieste, Department of Mathematics and Informatics

In this seminar, we will have an overview of Machine Learning techniques, going from classical methods to state-of-the-art. We will see how a data-driven approach can enrich the scientist's point of view and how Machine Learning is becoming a major player in many fields of science. After a short intro, we will see concrete examples of applications to all kinds of chemical problems, ranging from spectra prediction to chemical reactivity and drug design.

Short CV of Alex Rodriguez:

Alex's interests are at the interface between physics and data science: he wants to understand how the properties of data generated by physical simulations are related to the actual physical properties of the systems under study. Alex develops new Machine Learning methods (mostly unsupervised) that have been useful in many fields beyond physical sciences: clustering algorithms, density estimation, and manifold learning algorithms. Since 2022 he is an assistant professor at the University of Trieste. Previously he was the "Ludwig Boltzmann" Senior Postdoctoral Fellow at the Condensed Matter and Statistical Physics section at the International Center for Theoretical Physics (ICTP), a postdoctoral fellow at the International School for Advanced Studies (SISSA), and a professional researcher at the Università Politècnica de Catalunya (UPC). Alex obtained his Ph.D. at the University of Barcelona in 2012. He is teaching in the Artificial Intelligence degree at the University of Trieste, in the SISSA Theoretical and Scientific Data Science Ph.D. program and in the Master of High-Performance Computing (SISSA/ICTP).

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