DIPARTIMENTO DI SCIENZE MATEMATICHE E INFORMATICHE, SCIENZE FISICHE E SCIENZE DELLA TERRA
Dottorato di Ricerca in Fisica

Appunti di Fisica '24

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Sala Seminari, CNR-IPCF

Chemistry meets archaeology in the era of machine learning

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Chair: Rosa Ponterio

The convergence of chemistry, archaeology, and machine learning marks a transformative juncture in interdisciplinary research, promising profound insights into our understanding of ancient civilizations and material cultures. This presentation explores the burgeoning intersection of these fields, highlighting the synergistic potential of applying advanced chemical analysis techniques alongside machine learning algorithms to unravel historical mysteries. From deciphering the composition of ancient artifacts to elucidating the secrets of ancient metals, this interdisciplinary approach offers unprecedented opportunities for archaeological discovery and conservation. By integrating traditional archaeological methods with cutting-edge chemical analyses and machine learning models, researchers are poised to unlock new dimensions of insight into the past, illuminating the complexities of human history with unprecedented precision and depth. This research underscores the pivotal role of collaboration across disciplines in shaping the future of archaeological inquiry and heritage preservation in the digital age.

Some cases study will be presented as example of the possible approaches to follow.