INSTITUT FÜR ISOTOPENFORSCHUNG UND KERNPHYSIK DER UNIVERSITÄT WIEN

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zum

I N S T I T U T S S E M I N A R

von

Ina REICHE

Centre of Research and Restoration of the French Museums (C2RMF) UMR 171 CNRS, Paris

Ion Beam Analysis at the Louvre

Accelerator-based analytical methods e.g. PIXE (Particle Induced X-ray Emission), PIGE (Particle Induced Gamma-ray Emission), and RBS (Rutherford Backscattering) are increasingly applied to the study of art and archaeological objects as they are extremely sensitive, non-destructive and can be realised in air using an excitation spot in the micrometer range.

The *Accélérateur du Grand Louvre d'Analyse Élémentaire*, AGLAÉ, has been in operation and under constant development at the Louvre museum since 1990. It is based on a 2-MV Pelletron tandem acccelerator and is devoted to the study of art and archaeological objects. Analysis of objects of the cultural heritage can give important information on the provenance of historical and archaeological materials, on ancient fabrication technologies and permits to establish indirect dating criteria. Alteration phenomena can be investigated and their understanding enables the establishment of conservation strategies.

The seminar is intended to present recent research projects performed at the Louvre using ion beam analysis in order to highlight the impact of this tool on cultural heritage. Results on objects as ancient as fossilised mastodon ivory, as precious as gemstones and as fragile as metal point drawings from the Renaissance will be discussed.

Donnerstag, 18. März 2004, 16:30 Uhr

1090 Wien, Währingerstr. 17, "Kavalierstrakt", 1. Stock, Seminarraum von VERA

W. Kutschera