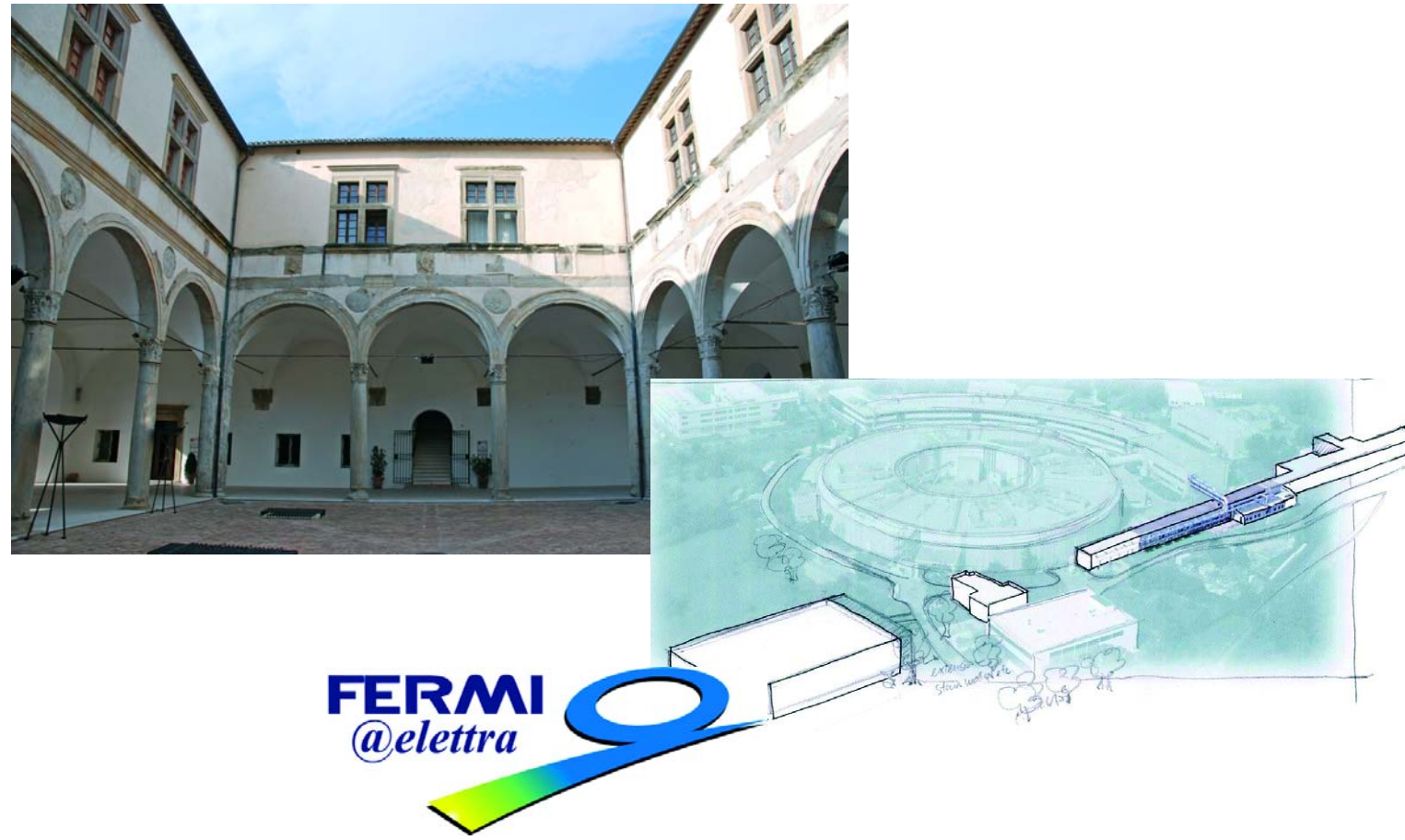




Dipartimento di Fisica

Sincrotrone Trieste



New science with new 'eyes': opportunities and challenges using free electron laser radiation and 1st TIMEX project collaboration meeting

Camerino 29 - 30 settembre 2008

Palazzo Ducale - Sala della Muta

The development of novel sources for the generation of femtosecond pulses in the UV/x-ray range of unprecedented peak brilliance, opens new opportunities for scientific and technological research in a broad field of disciplines including material science, structural biology, physics, chemistry, medicine and nanotechnology.

FERMI@Elettra (Free Electron laser Radiation for Multidisciplinary Investigations at Elettra) is a single-pass FEL user-facility covering the wavelength range from 100 nm (12 eV) to 10 nm (124 eV), presently under construction next to the third-generation synchrotron radiation facility ELETTRA in Trieste, Italy.

The event features a series of seminars giving a general presentation of the ELETTRA laboratory, the FERMI@Elettra project and an overview of the main scientific opportunities and research proposals.

Among those, the TIMEX project, recently funded through a collaboration between Sincrotrone Trieste and the University of Camerino, for the design and construction of an end-station to investigate metastable and/or excited states of matter under extreme conditions.

The instrument will exploit the unique intensity and energy of the Fermi@Elettra FEL beam for an efficient ultrafast heating of most bulk-like dense samples, in two classes of experiments: 1) creation and investigation of warm dense matter (WDM); 2) phase transitions occurring in metastable states under extreme conditions.

Programma:

Lunedì 29 settembre

- 15.00 Apertura del convegno
Saluto del Rettore UNICAM
- 15.30 Seminari scientifici

Martedì 30 settembre

- 9.00 Riunione dei partecipanti al progetto TIMEX

Speakers:

- G. Paolucci** Sincrotrone Trieste
- M. Svandrlík** Sincrotrone Trieste
- D. Cocco** Sincrotrone Trieste
- C. Masciovecchio** Sincrotrone Trieste
- F. Bencivenga** Sincrotrone Trieste
- A. Di Cicco** Università di Camerino
- A. Trapananti** Sincrotrone Trieste/Università di Camerino

<http://gnxas.unicam.it/meetingTIMEX>

Organizzazione

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