

# **THE SPECTROMETER FOR THE FLASH FREE-ELECTRON-LASER**

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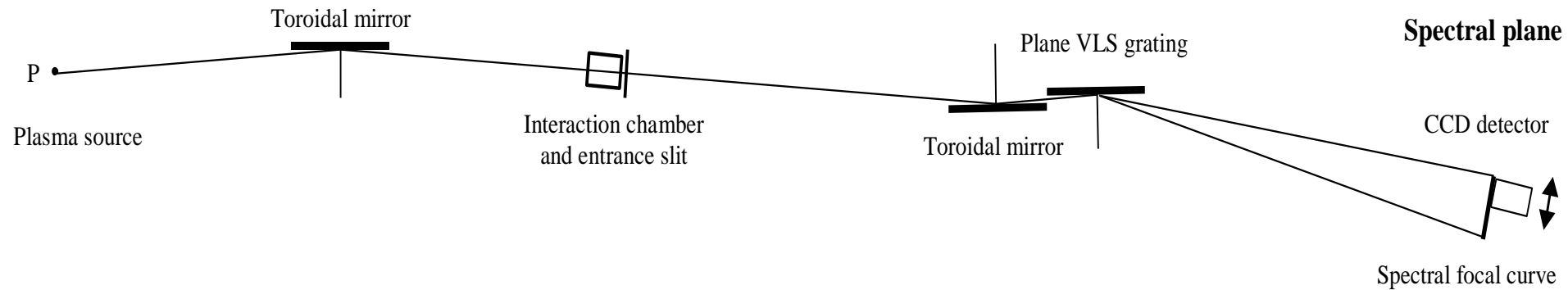
# Introduction

The LUXOR laboratory (CNR-INFM, Padova) realized a grazing-incidence flat-field spectrometer for the XUV spectral region.

## Requirements

4-50 nm spectral region

$\approx 2000$  resolution



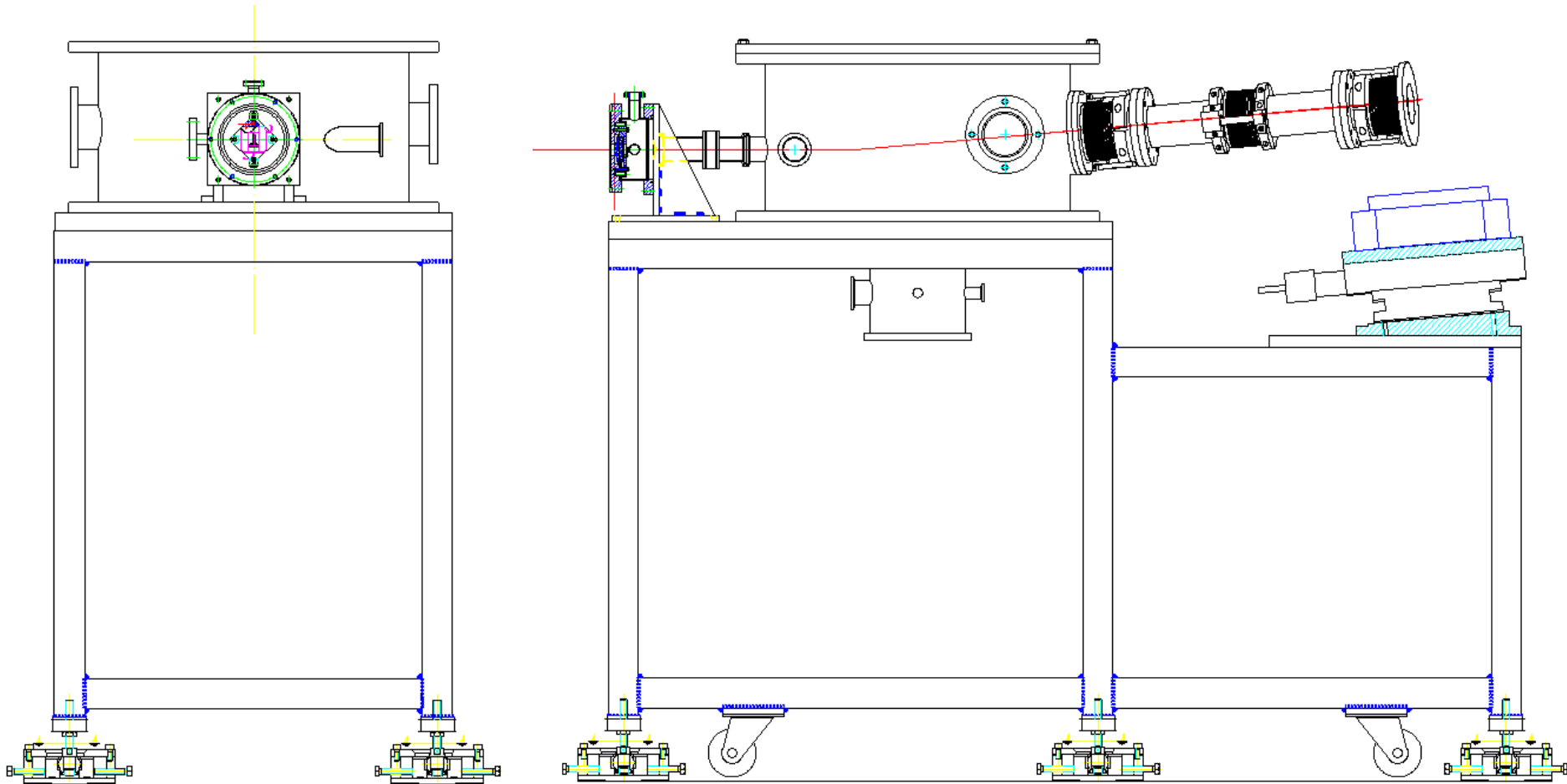
# Instrument

Laboratory for  
UV and X-ray



Optical Research

CNR-IPM



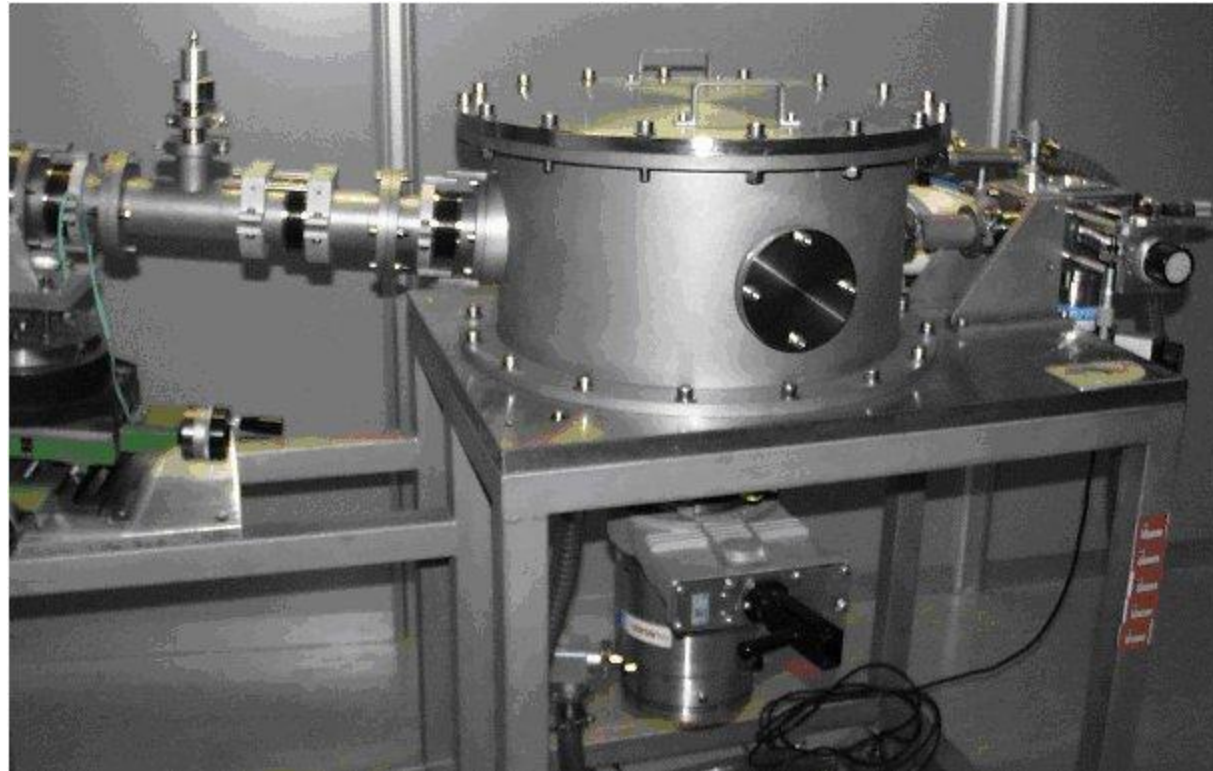
# Pictures of the instrument

Laboratory for  
UV and X-ray



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# Present use of the spectrometer

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At present, the spectrometer is installed in the FLASH facility (Hamburg, Germany) to monitor the spectrum of the free-electron-laser.



Spectrometer

entrance slit

Intensified CCD

Nicht berühren !!  
Empfindlicher Aufbau!!!

Nicht berühren !!!  
Empfindlicher Aufbau!!!