



HORIBA

Scientific



Julien SERRE – Chef de projet VUV

Workshop TANGO - 13 Mars 2013 - Orsay

HORIBA Jobin Yvon : History & Milestones

Almost 200 years of Advanced Instruments Design



1819



1893



1923



1995



1997



2002



2009



2012

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Automotive Test Systems | Process & Environmental | Medical | Semiconductor | Scientific

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HORIBA Jobin Yvon Overview

- Founded in 1819
- HORIBA Jobin Yvon Global = \$ 100M
 - 450 employees, 5 production sites
 - Longjumeau, Lille, Palaiseau, France; Edison, NJ USA (2)
- HORIBA Group
 - \$ 1000M company
 - 5500 employees
 - 5 Business segments



HORIBA One Company



Automotive Test Systems

- Emission Measurement Systems (EMS)
- Test Automation Systems (TAS)



STARS



Process & Environmental

- Environmental Systems
- Environmental Regulation & Process Business



Medical

- In-Vitro Diagnostic (IVD) Systems
- Integration of HORIBA ABX's Technology & Marketing Know-How



Semiconductor

- Mass Flow Controller
- In situ ellipsometry



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- Synergy of HORIBA and HORIBA Jobin Yvon's Technologies
- Raman, Gratings, and Fluorescence



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Instruments



Elemental Spectrometry & Analysers



μ EDXRF



Fluorescence



Particle Size Analysers



SPRi



μ Raman Spectro.



Ellipsometers



Forensics

Components & Modules



Gratings



Optical Spectroscopy



OEM



VUV

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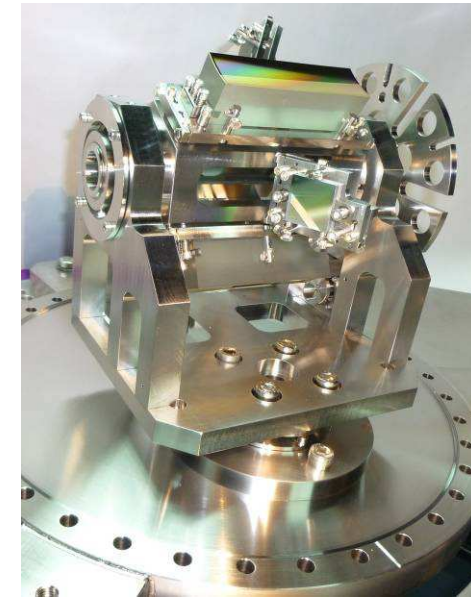
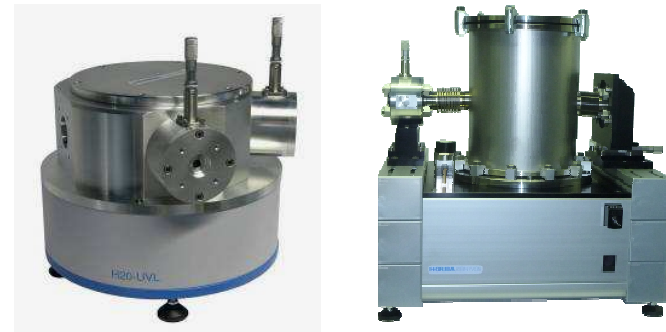
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VUV Monochromators

- VUV Monochromators: a wide range of instruments from few nanometers to visible
- Key words: modularity, custom designs
- Applications:
 - EUV Reflectometry/Absorption
 - Plasma Physics Study
 - High Harmonics Filters characterisation
 - Transmission/reflection measurements
- Control:
 - RS232 or USB
 - Software: HJY software or Labview Runtime



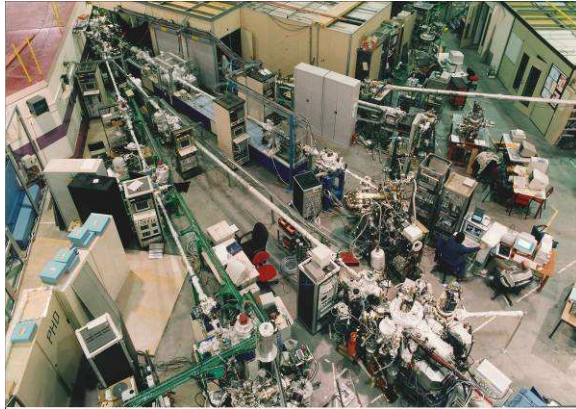
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VUV Beamlines

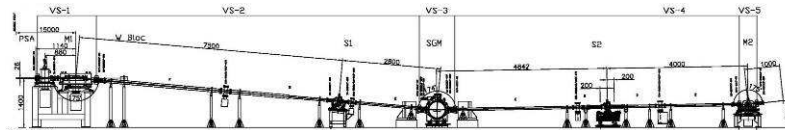


Déjà au LURE...

- Ligne SB7 (1997)
- Ligne SU8 (1998)
- Ligne SU5 (1999)

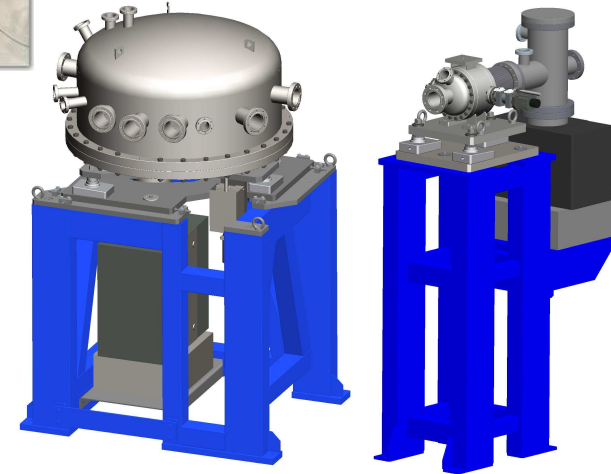
Puis à Soleil...

Tempo, DESIRS, Cassiopée, Pleiades,
Antarès, Deimos, Galaxies



Et ailleurs...

SLS, CLS, ESRF, Daresbury, BESSY,
ANKA, DESY, INDUS2



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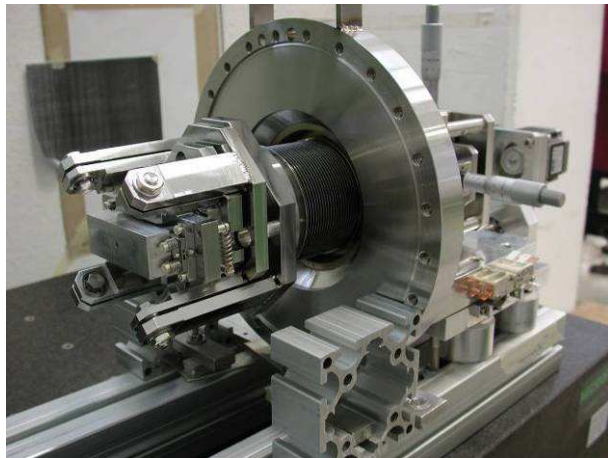
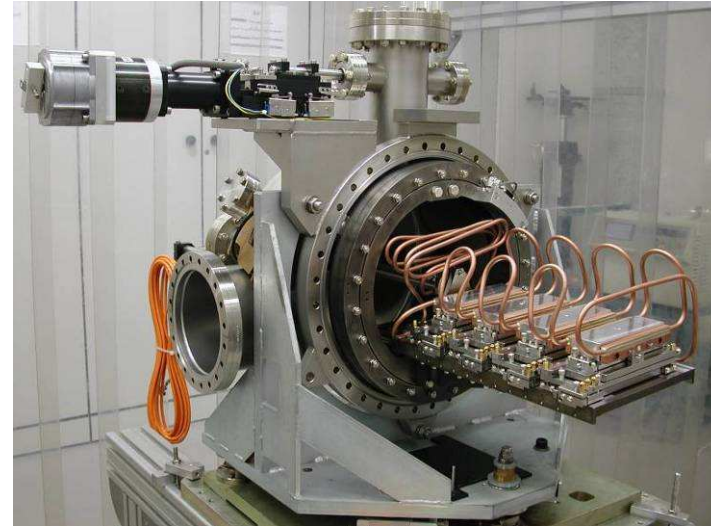
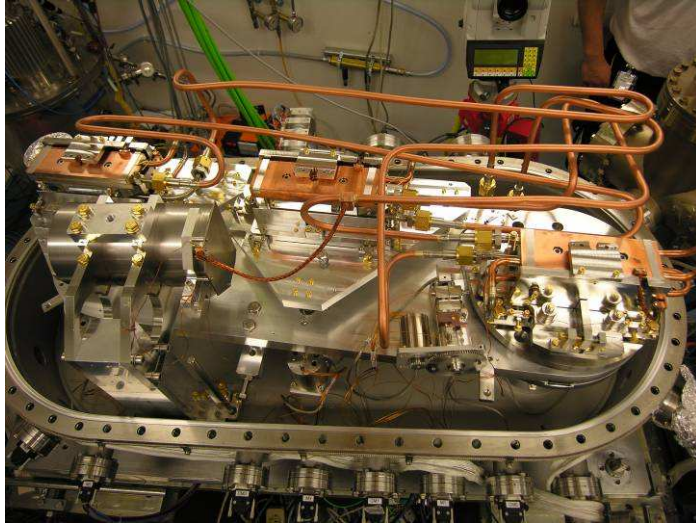
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VUV Beamlines components

Some examples



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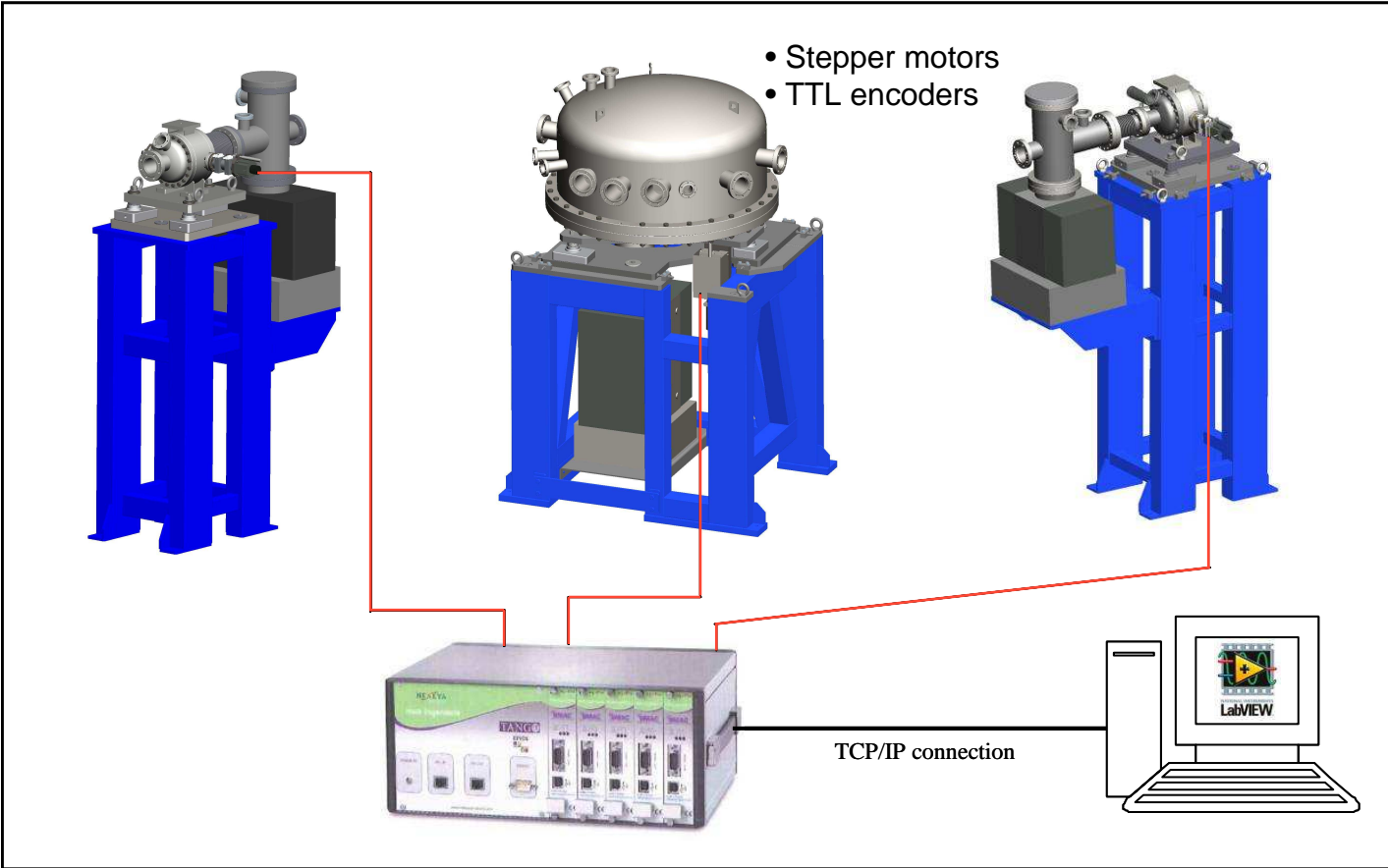
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Control/command



Perspectives d'interfaçage TANGO

■ VUV monochromators:

- Systèmes destinés à être intégrés dans un environnement plus complexe (chambres échantillons, détecteurs, systèmes motorisés, ...)
- Systèmes complets intégrant moteurs, détecteurs, codeurs,...
- Modularité des instruments



■ VUV Beamlines:

- De plus en plus de demandes pour des systèmes « clés en main »
- Service : fort intérêt d'une uniformisation des langages



Thank you