

Status and commissioning of TTF2 OTR System

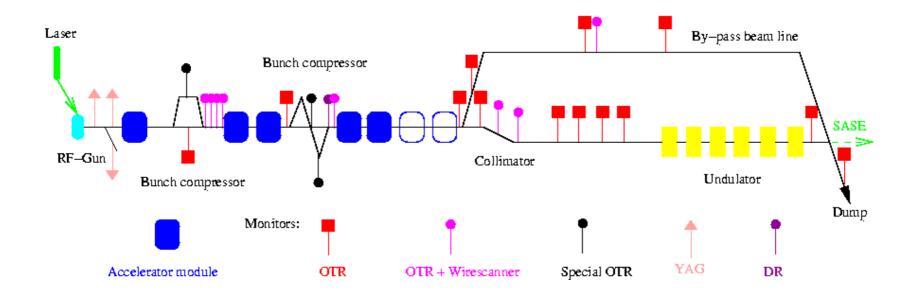


K.Honkavaara, DESY



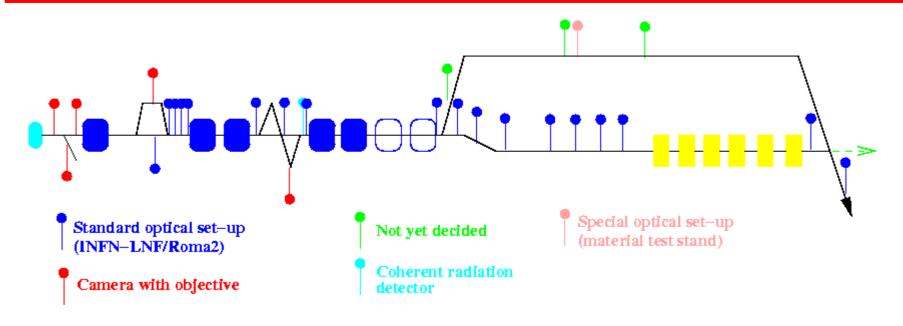
TTF2 OTR system is designed and constructed in collaboration between DESY and INFN-LNF and INFN-Roma2

OTR monitors along the TTF2 Linac



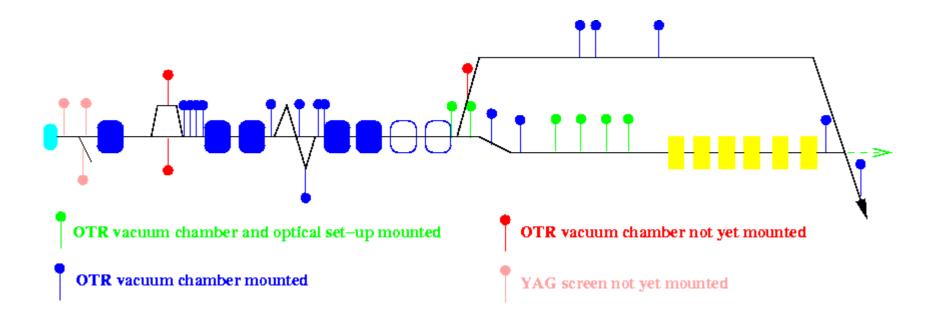
- 13 standard OTR monitors
- 8 combined OTR and Wire scanner monitors
- 3 special OTR monitors in bunch compressors
- 3 Ce:YAG screens in RF-gun section
- 1 Diffraction Radiation (DR) radiator

Optical set-ups of OTR monitors



- 18 standard optical set-ups from INFN-LNF/Roma2 along the linac
- 3 cameras with an objective in the RF-gun area
- 2 cameras with an objective in dispersive sections of the bunch compressors
- Optical set-ups for the by-pass line not yet decided (simplified set-up or a camera with an objective)

Status of OTR monitors (15.1.2004)



- 22 of the 25 OTR vacuum chambers mounted to the linac
- 6 of the 18 standard optical set-ups mounted to the linac

Time schedule of installation work

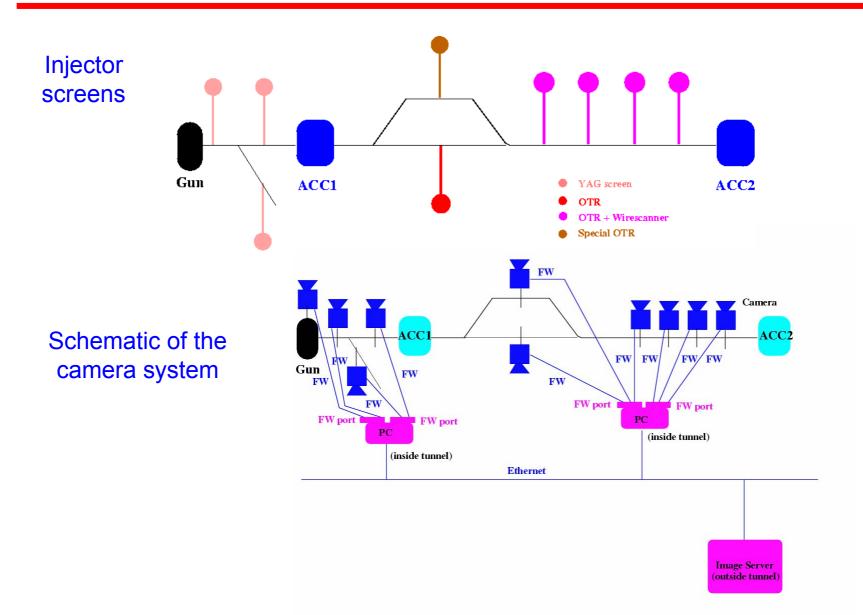
Mounting of the rest of the optical set-ups

- Cameras in RF-gun section: end of January/begin of February 2004
- 5 standard optical set-ups + 1 special set-up at the injector (BC2 area): second half of February 2004
- Rest of the optical set-ups: after the injector run

Read-out system

- Preliminary version of the read-out system for gun cameras
 February 2004
- Complete read-out system for the injector (hardware + software) by the end of March 2004 (earlier, if needed)
- Read-out system for the linac will be installed after the injector run.

Injector Screens and Cameras



Commissioning of the injector OTR system

- Screen movement (pneumatic actuators for YAG screens, stepper motor actuators for OTR screens)
- Camera read-out system (hardware and software)
- Commissioning of optical set-ups with beam
 - Adjust camera (shutter, gain) and trigger settings
 - Performance of optical set-ups (beam position, focusing, calibration, magnification, filters, remote control, etc.)
- Control and acquisition software