

DESIR beam lines





- 1. The quadrupoles triplet prototype for DESIR
- 2. R&D for the electrostatic deflector
- 3. New configurations
- 4. Input and output implantations, beam specs

This work is supported by the French ANR, Investissements d'Avenir, EQUIPEX Contract number ANR-11-EQPX-0012



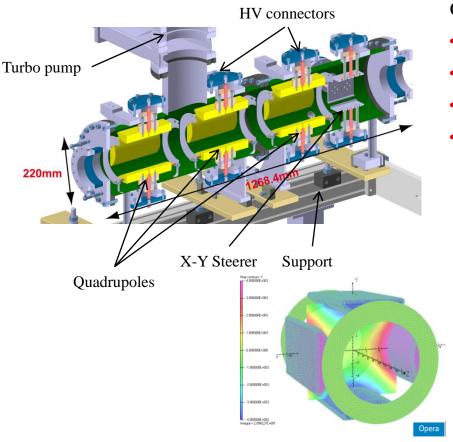


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The quadrupoles triplet prototype for DESIR

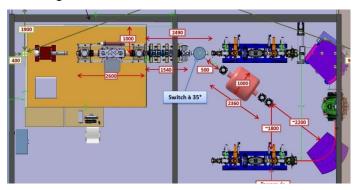
- 2013 : R&D of a electrostatic quadrupole triplet + X-Y steerer at IPN Orsay
- March 2014: connection to GPIB at CENBG



Cost:

- Mechanic (electrodes, vacuum chamber ...) = 37k€
- Pumping system = 17k€
- HV system = 13k€
- Support = 2k€ ~69k€

Implantation at CENBG in 2014



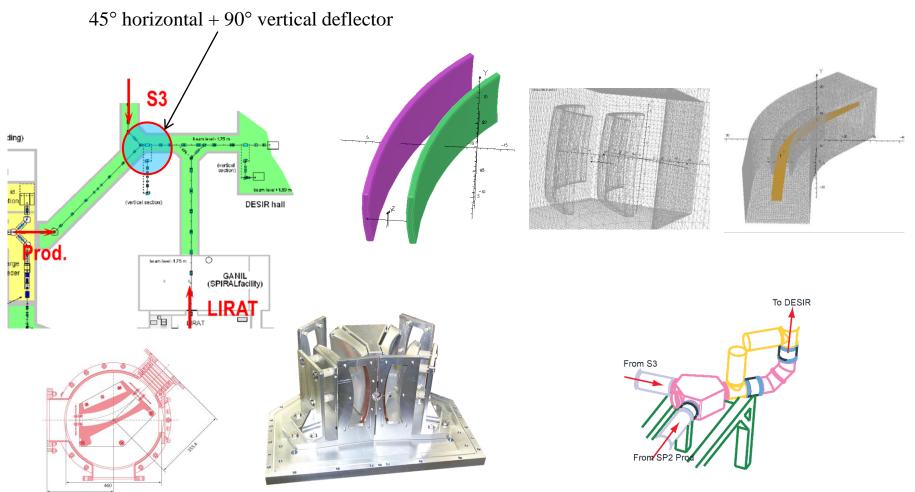
Goals: validate and use a design which can be use systematically along the beam lines (integration, mounting, alignments, vacuum, beam tuning ...)



R&D for the electrostatic deflector

• Autumn 2013, 2014: studies, design and build deflector to the DESIR beam lines.

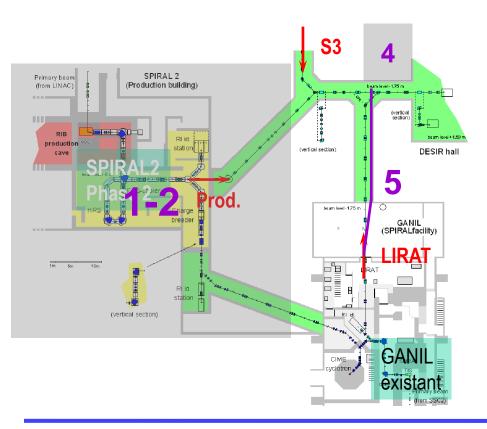
Mail goal: validate a design of the deflection zones (-2 level):



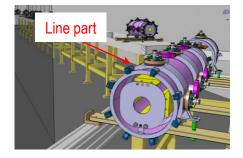


New configurations

- 1. SPIRAL2 production process not construct with DESIR
- 2. LEBT SPIRAL2 Production channel is postponed
- 3. S3 to DESIR, LIRAT to DESIR and experimental hall
- 4. SPIRAL2 High-Intensity Radiofrequency Cooler (SHIRAC) + High Resolution Separator (HRS) at -1 level (preferential location)
- 5. South-North LEBT from LIRAT have to be shifted on the east

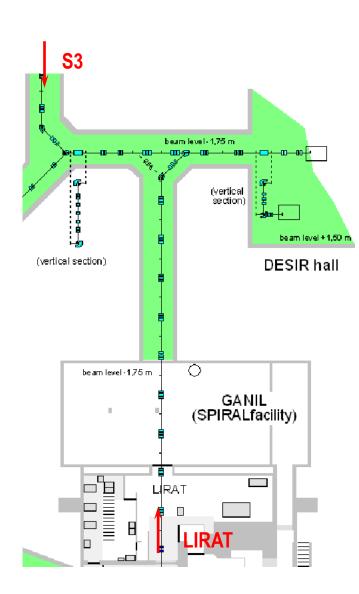


- New beam dynamic studies must be done according the modifications
- Strong connection to the building program





Input and output implantations, beam specs



- LEBT coming from S3 need more details about the beam characteristics
- Location of SHIRAQ/HRS will be fixed
- Physics set-up must be fixed
- Physics requirements in experimental hall must be finalize
- Beam requirements for each set-up must be produce
- => Beam lines mechanical design can be realized