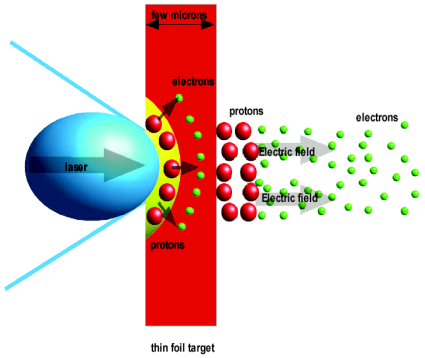
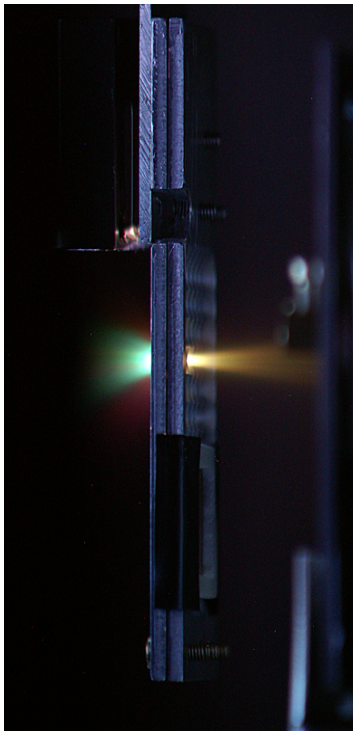
NTA SL_LILIA (Laser Induced Light Ions Acceleration)

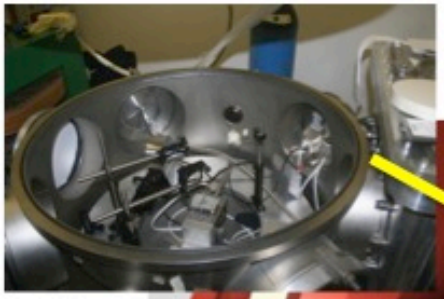




LILIA is an experiment of light ions acceleration trough laser interaction with thin metal targets to be done at the SPARC-LAB facility at LNF.

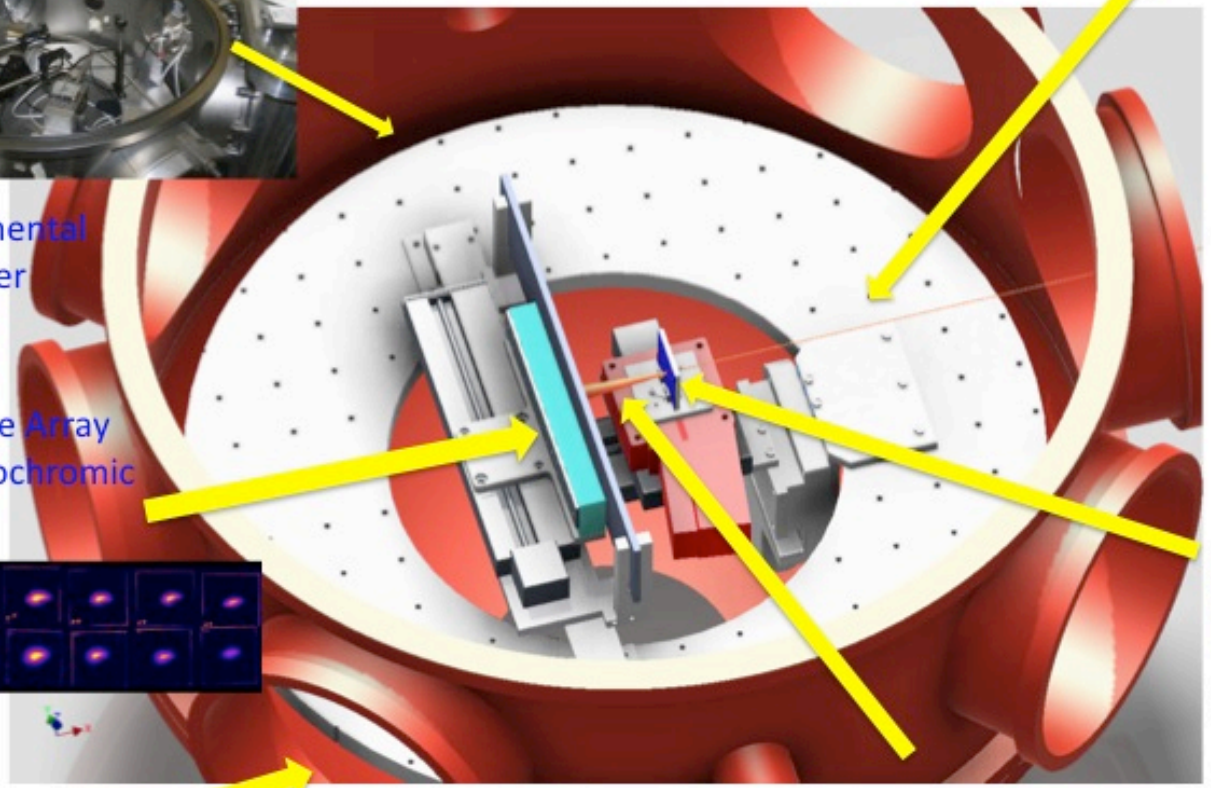
Participant Groups: Milano, Milano Bicocca, Bologna, Pisa, Lecce

Experimental setup – Phase 1

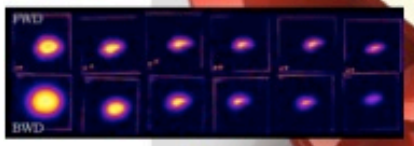


Experimental chamber

Laser Beam



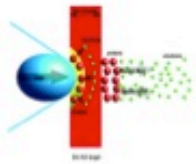
Movable Array of Radiochromic Films



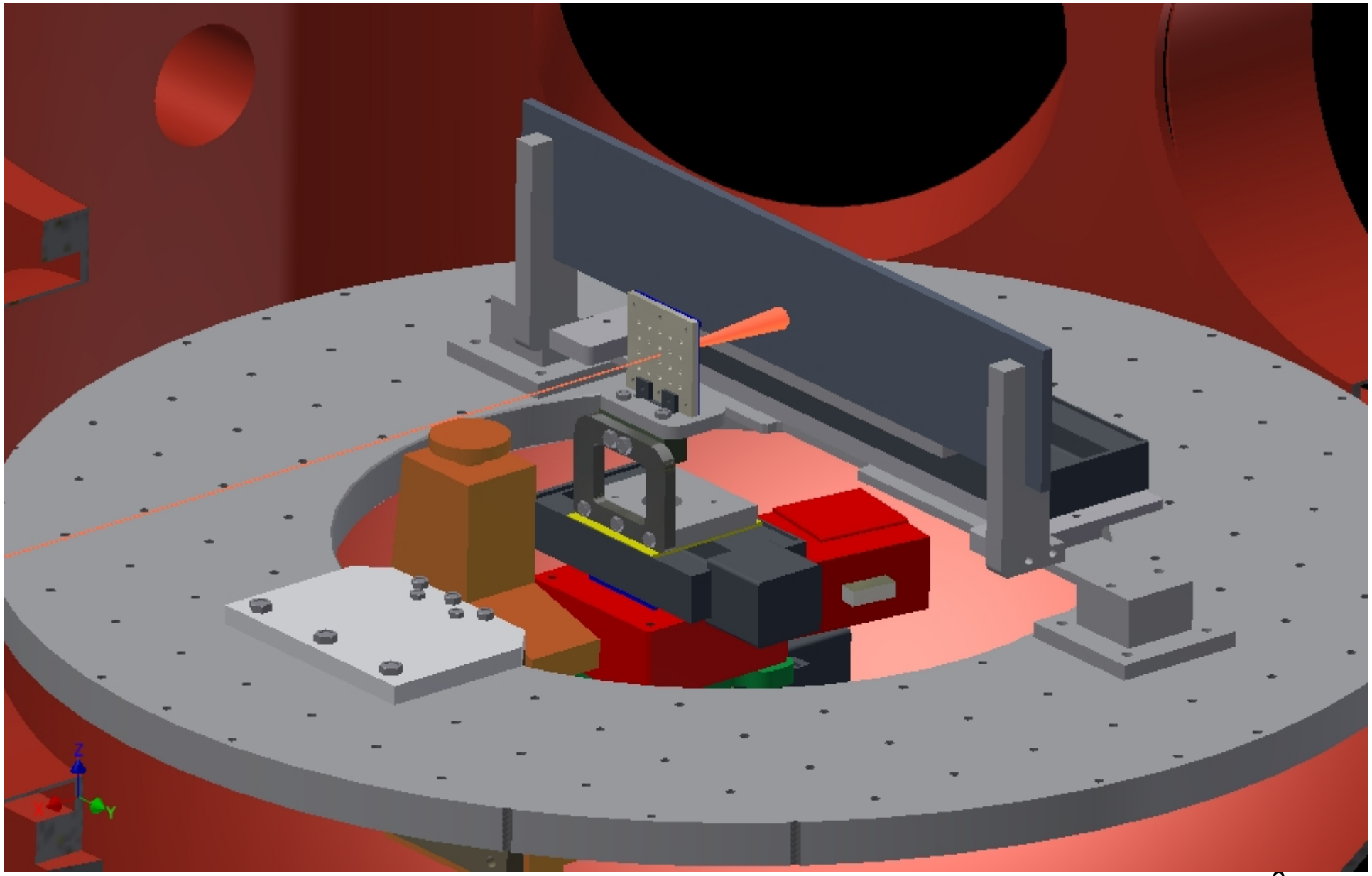
Multi-shot Target

Proton Beam

Thomson Parabola



LILIA Experiment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LILIA PHASE I

- The possibility to produce a real proton beam able to be driven for significant distances (50-75 cm) away from the interaction point and which will act as a source for further accelerating structures.

Attivita' principale 2013

- Produzione e diagnostica del fascio da interazione laser
- Sviluppo di targhette esotiche
- Progetto e realizzazione di un solenoide ad alto campo e del relativo alimentatore pulsato (di cui e' gia' stato realizzato un prototipo artigianale)

Anagrafica 2013

De Martinis Carlo	90%
Fazzi Alberto	40%
Giove Dario	90%
Giulini Agosteo Stefano	30%
Varoli Vincenzo	40%
Passoni Matteo	40%
Pola Andrea	40%
D’angelo Giovanni	30%
Gini Luigi	50%

Richieste finanziarie 2013

MI	10 Keuro
ME	5 Keuro
Consumo	20 Keuro (targhette, solenoidi, lavorazioni meccaniche)
Inventario	5 Keuro
Apparati	25 Keuro (alimentatore alta tensione impulsato per solenoide)