

CNES/ESA Radiation Effects Final Presentation Days 2015

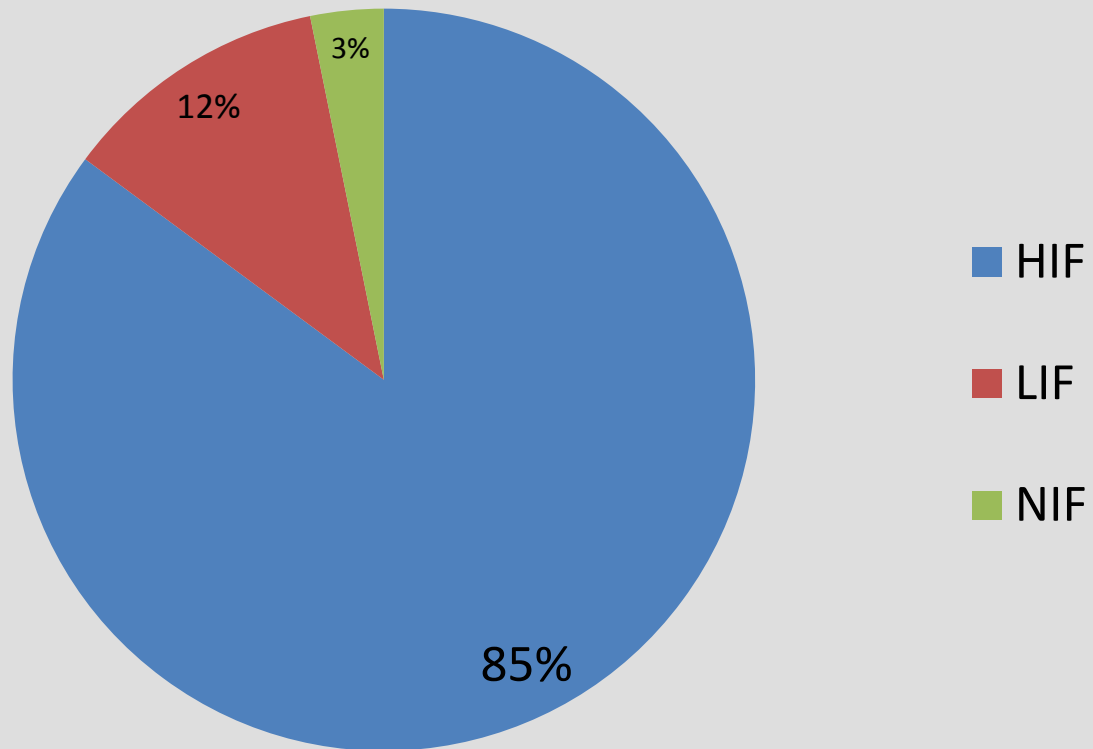
UCL Irradiation Test Facility Status Report

Laurent Standaert



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- 2014 component test beam time (1687 hours)

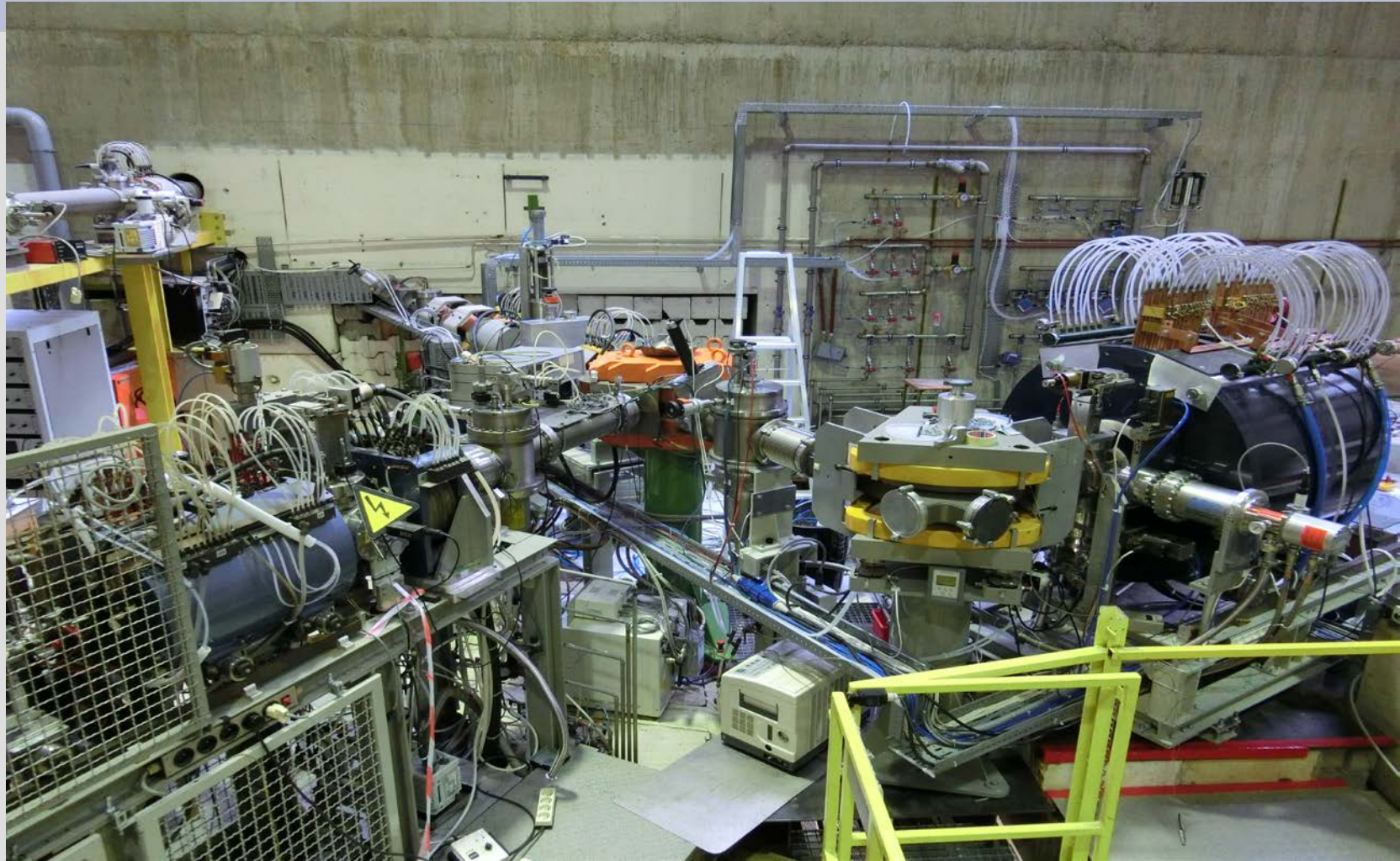


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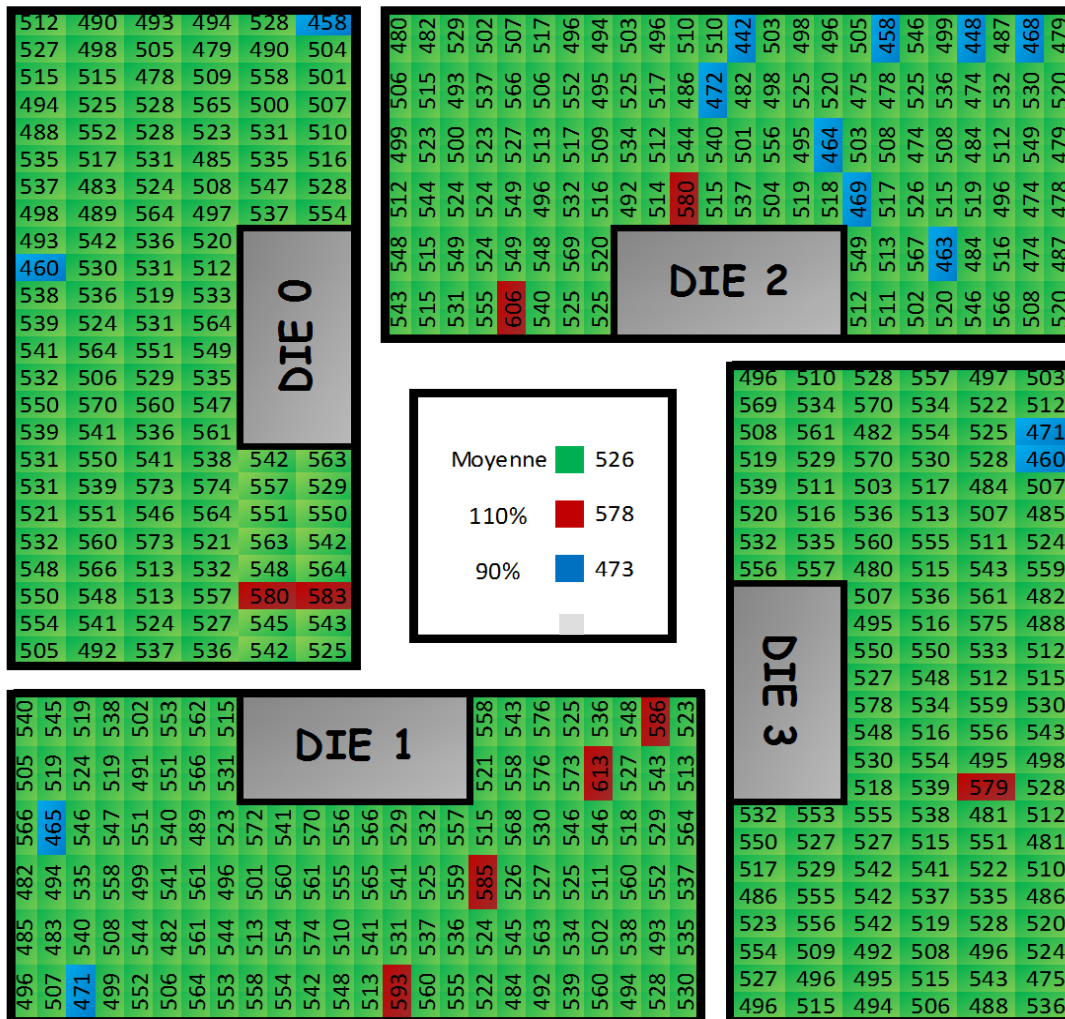
- HIF achieved developments
 - New version of Labview control program
 - Sweeping magnet => better beam homogeneity
 - Connection of the new ECR source to the Cyclone 110
 - First 1.1 GeV Xenon beam in december 2014



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For HIF and LIF

- Archiving of all calibration data
- Calibration reports available



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- LIF achieved developments
 - New version of Labview control program
 - Automatisations of beam profile
 - Addition of a degrador to reach 10 MeV
 - Beam line re-alignment

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- Under development (for 2015)
 - New accelerated elements with the new source for a new heavy ions cocktail (coming soon)
 - Removal of the diffusion foil to increase energy on DUT

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- Under development : New Heavy ions cocktail

ion	Energy (direct beam) [MeV]	Range (direct beam) [μm]		Energy on device [MeV]	Range on device [μm]	LET on device [MeV/(mg/cm ²)]
13C4+	133	276		131	269,3	1,3
14N4+	124	175,4		122	170,8	1,9
20Ne6+	195	156,7		190	150,6	3,6
40Ar12+	391	126		379	120,5	10
58Ni18+	607	106		582	100,5	20,4
83Kr25+	818	100		779	95	32,2
124Xe35+	1073	78,6		995	73,1	62,5

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Thank you and see you soon

