

Updated Projections for Deuteron- gold

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Updated projections for d-Au energy scan with new intensities

E (GeV)	N (10 ⁹)(old)	L_week (old)	N(10 ⁹)(new)	L_week (new)
9.8 d-Au	140*0.9	1.5 nb ⁻¹	200*2.0	4.5 nb ⁻¹
19.5 d-Au	140*1.5	5.0 nb ⁻¹	200*2.0	9.5 nb ⁻¹
31.2 d-Au	140*1.5	11.0 nb ⁻¹	200*2.0	20. nb ⁻¹
100 d-Au	140*1.6	110.0 nb ⁻¹	200*2.0	200. nb ⁻¹

Factor of 3

} Factor of 1.9

Setup times

Energy	Setup time (old)	Setup time (new)
9.8 d-Au	1 day	1 day
19.5 d-Au	0.5 weeks	3 days
31.2 d-Au	0.5 weeks	3 days
100 d-Au	0.5 weeks	2 days

improvement is over-estimated.

2. There is not much buffer even in the current schedule in case of big failure.

3. It is possible that the IR2 aperture could limit the performance of d-Au run, which is hard to quantify.

Other Considerations