

SiPM Considerations

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ePIC EEEMcal General Mtg

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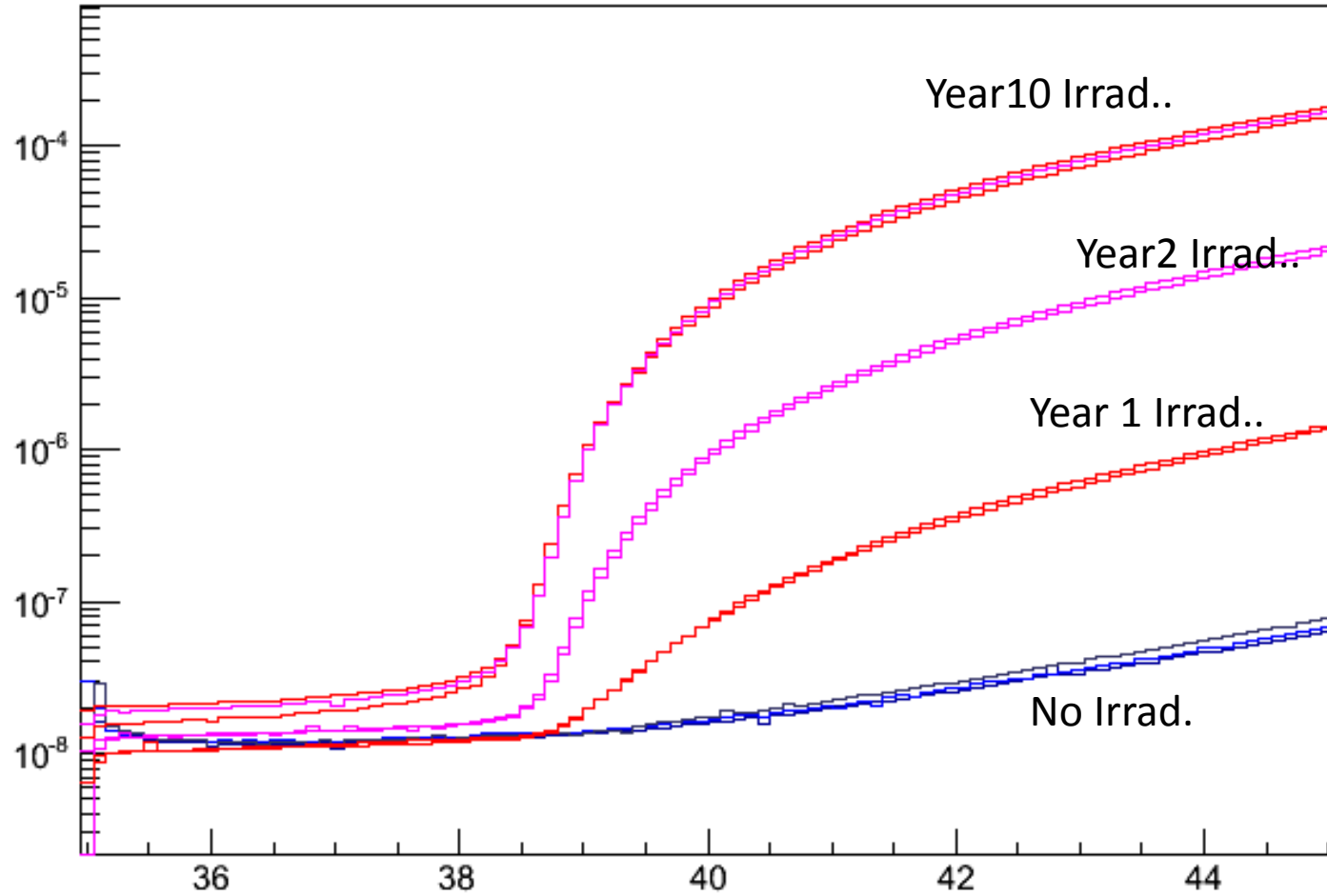
Price Options Immediate Funds Needed

- Assume Sasha Bazilevsky Mechanism/Process gets needed funds for remaining needs, such as adapter board fab/assembly in late Aug/Sept timeframe
- Order siPM's ASAP
 - 3mm² siPM's came faster last time, still should be time to get in time, for 6015, order needs made ~now based on December order fulfillment times
- Costs: [10vs 15 mum always same]
 - 3mm : \$53/siPM, discount 100 unit: \$42/siPM, discount 300 \$19/siPM
 - 6mm \$125/siPM, discount 100 unit \$65/siPM
- discount level needs single buyer
- Some Options
 - Option 1) Single group buyer \$6500 – 100 6015 siPMs , \$7600 3015 500 siPM ALL new 25 channels worth
 - Other options : reuse some/all ones in hand, including some irradiated – maybe place on edges – expect some annealing – perhaps even baking could accelerate? 12-13 channels worth need ~12 more
 - Option 2) Many groups contribute, minimum, probably 3mm, around \$5500 (6mm is more expensive but similar)
 - Option 3) Many groups contribute, get more, probably 3mm, around \$8000- \$12K)
 - Option 4) Two groups contribute to get ~100 3mm's each 2 x 2980 = 6000

From UC Davis: 6015 ((6mm)², 15 μm pixel)

quick first
look

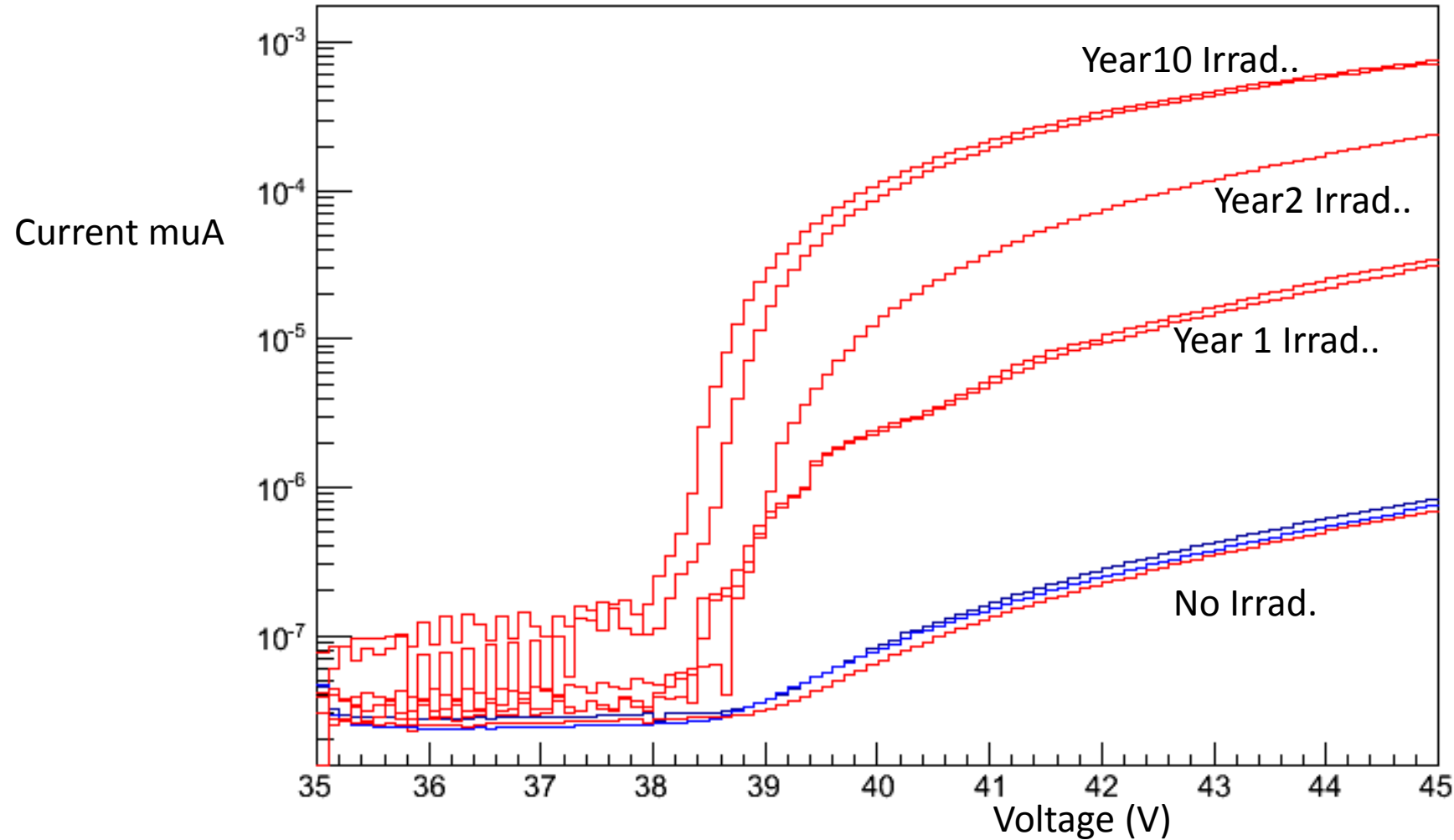
Current μA



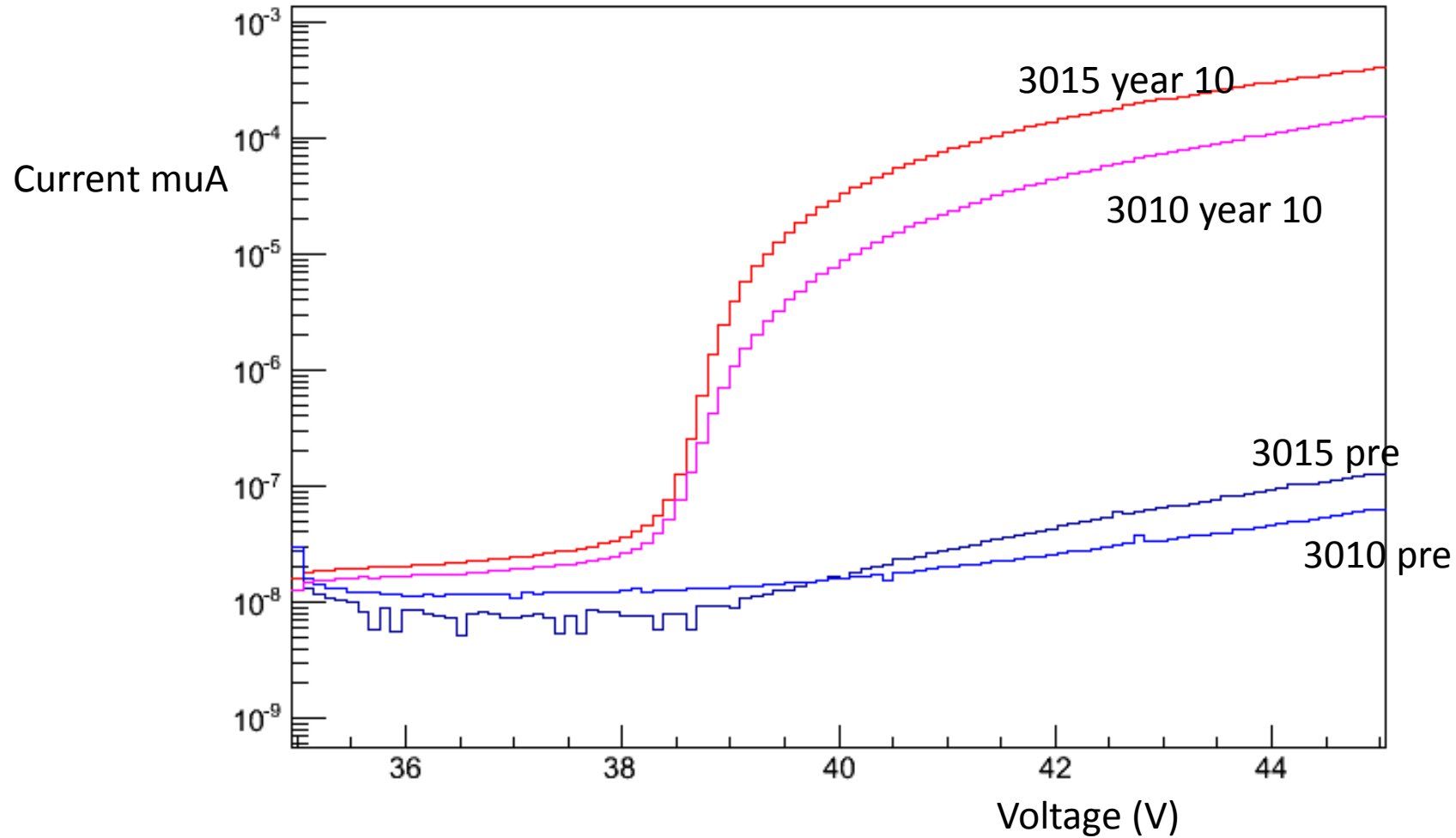
See last readout meeting on indico for
more detailed info about radiation doses

Voltage (V)

3010 ((3mm)², 10 μm pixel)



$(3\text{mm})^2$, $15\ \mu\text{m}$ pixel vs $10\ \mu\text{m}$



might have the
10 vs 15 labeled
oppositely