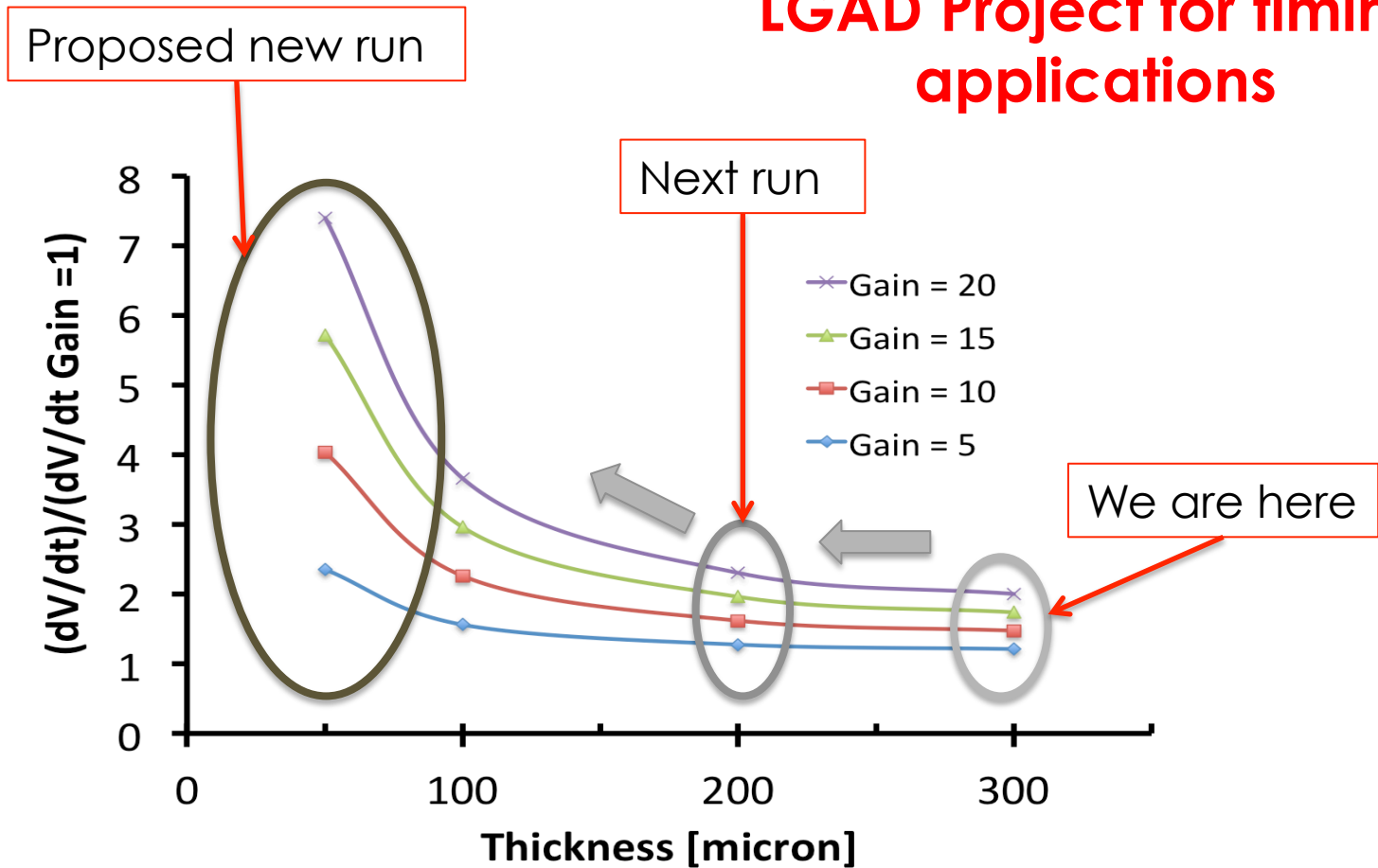


Proposal for common RD50 project

Significant improvements in time resolution requires thin detectors

LGAD Project for timing applications



n-in-p thin detectors are the most promising design for rad-hard UFSD:
A run with several thicknesses will allow assessing the real capability of UFSD

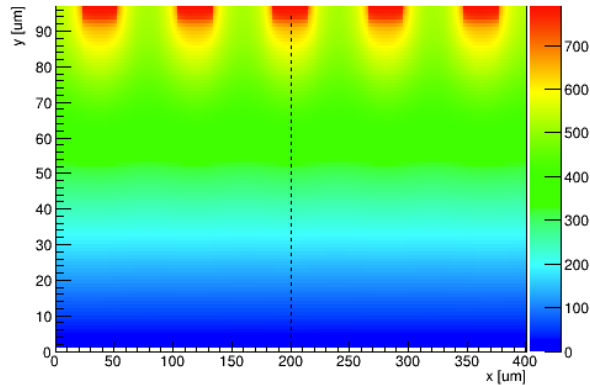
Proposal for common RD50 project

Is there a better design than n-in-p for LGAD finely segmented sensors?

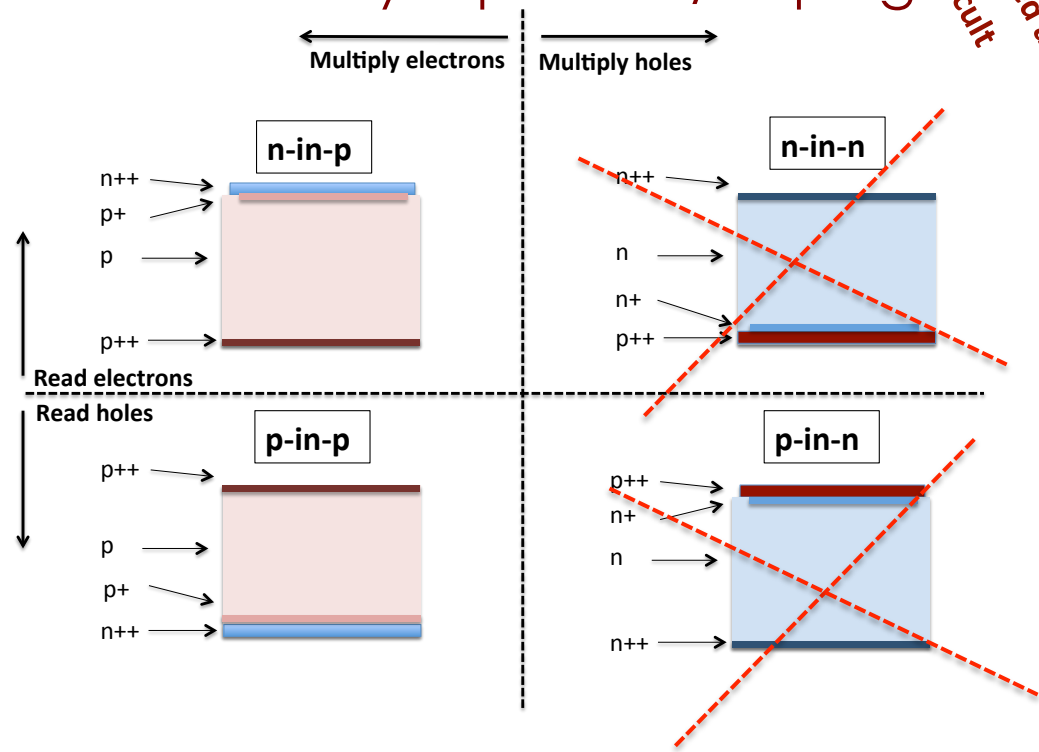
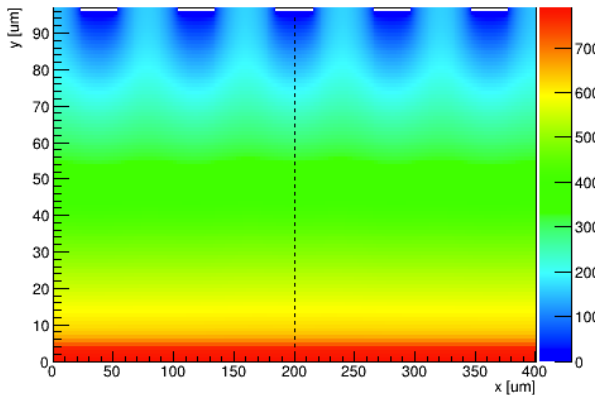
LGAD Project for tracking applications

Gain layer position/doping

*hole-initiated avalanche,
more difficult*



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Moving the junction on the deep side allows having a very uniform multiplication, regardless of the electrode segmentation