

From RD50 meeting

1. Simulations show reduced gain due to lowered field due to hole trapping
 - Cause of “Effective acceptor removal”?
 - Important to redo with 50um LGAD to understand the performance drivers
 - Mitigation possible?
2. Continue Ga project since we expect a general improvement of radiation resistance beyond just LGAD specific effect
3. Get SIMS going at LAL, continue to include Dop.Con. test structures for beveling.
Do they need to be modified for thinner sensors?
RD50 Common Project: Michael Moll wanted to know how much extra cost for the CMS study.
4. Investigation of gluing to interconnect LGAD and ASICs by Calice group
5. Electronics specification are getting close to be written
6. Think of having another electronics meeting at the time of the Paris Trento meeting, either in Paris or Sevilla.
7. Schedule of HGTD decision in early 2017 requires accelerated production of HGTD specific LGAD.
November 2016 BT: irradiated sensors (?)
Summer 2016 BT: un-irradiated sensors
Irradiation of sensors
 - April/May 2016: Delivery of HGTD specific LGAD
8. Proposed Fast-track for prototype HGTD LGAD production at CNM:
 - a. Special run: entire wafer for HGTD and CT-PPS
 - b. 4” wafer
 - c. 50um epi
 - d. Different p-implant doses for 2 wafers each
 - e. Continue with the RD50 project toward 6” development.
 - f. Explore lower resistivity?
9. Radiation campaign needs a coordinator
10. Beam tests need a coordinator (hardware, trigger, DAQ, use of SAMPIC?)

Lenny 8" wafers with Tezzaron/Novati

Vagelis: sees 15% to 20% reduction in 10^{16} : need to measure at 10^{14} !

Update Proposal for doping concentration common project.

For LGAD design: increase the voltage dependent field: lower resistivity.