

# Discussion

# Full Detector Systems

21<sup>th</sup> RD50 Workshop, CERN, November 2011

# Things to be done/investigated?

- Samples from RD50 Micron run/Multiplication and 4”
  - **Multiplication recipe (narrow strip, shallow implant, ...)**
  - Multiplication profiles (in depth and in width)
  - Mixed irradiations
  - **MCz-n neutron irradiation (is the “magic” performance still there)**
    - to be done with many fluence points with p-n, n-n sensors
    - Edge-TCT measurements, Alibava
  - **Electric field (“active-bulk”) at very high fluences**
    - Edge-TCT (modelling – simulations)
    - Device simulations
  - **RT annealing of different samples**
- **CNM trenches**
- **Noise studies**
  - **Noise during multiplication (compare to theory)**
  - **Do Alibava and SCT128A behave in the same way?**
- **Work on proposed projects addressing specific topics:**
  - **Low resistivity implants for punch through protection**
  - **Edge isolation with oxide (n type) , Al (p-type) to achieve thin edge detectors**
- **Test beam (list of devices and aims)**
  - **Alibava setup in cold box**