

DECAL lectures summary

- **Lecture 1** – Ideal case and limits to resolution
 - (Assumes basic properties of EM showers covered by Roman)
 - Digital ECAL motivation and ideal performance compared with AECAL
 - Shower densities at high granularity; pixel sizes
 - Effects of EM shower physics on DECAL performance
- **Lecture 2** – Status of DECAL sensors
 - Basic design requirements for a DECAL sensor
 - Current implementation in CMOS technology
 - Characteristics of sensors; noise, charge diffusion
 - Results from first prototypes; verification of performance
 - Future prospects
- **Lecture 3** – Detector effects and realistic resolution
 - Effect of sensor characteristics on EM resolution
 - Degradation of resolution due to sensor performance
 - Main issues for improving resolution
 - Remaining measurements required to verify resolution