

**Signal Simulation
And Analysis Plan Proposal
(SAP)²**

- Signal simulation can be divided in different steps:
 1. MC Truth (100 keV electrons parallel to X axis);
 2. Physical event (straggling, ionization, QF applied);
 3. Produced image (diffusion in gas, gain and light yield);
 4. Collected image (solid angle, sensor sensitivity, sensor granularity, electronic noise);
 5. Reconstructed event (analysis tools applied);
- We should identify few variables (E, direction, PID) and study their behaviour as a function of the different parameters of various steps;
- An important step is the study the performance of Energy, PID and direction “evaluators”.