



## PicoSEC Activities at CERN

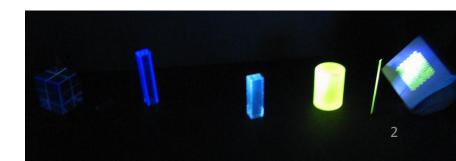
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18.01.12



## WP1: Crystal & Optics

- Characterization of scintillating crystals and fibers
  - Optical, scintillation, radiation hardness properties
- Understanding and improvement of light transport
  & collection
  - Ray tracing simulation
  - Surface treatment
  - Development of photonic crystals, optical components





## WP2: Photodetectors



- Characterization of different types of SiPM
- Performance studies of crystal & SIPM
  - Light yield, energy resolution, timing performance

Optimization of crystal-photodetector coupling

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## WP4: Detector integration & Prototyping

- Design and realization of detector matrices
  (Xtal + photodetector) for PET and calorimetry
- Test performances in test beam

