• identify collinear high energetic di-photon signatures with separation of 100 µm - 2 mm
• use three Micromegas detectors interleaved with Tungsten absorbers
• so far simulation based studies validated with testbeam data
• at 90 % background rejection achieve efficiencies of:
  • 20 % - 30 % for 0 ≤ d ≤ 300 µm
  • 57 % - 70 % for 500 ≤ d ≤ 1000 µm
• exemplary evaluated physics reach for FASER with significant improvement over no preshower baseline