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[328] First light detection with an Optical TPC

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Excellent particle detection momentum threshold, together with cost-effective scale-up, make the optical TPC, a strong candidate for reducing the systematic errors in future neutrino oscillation experiments. To produce thousands of photons per primary electrons, the TPC is equipped with a gas electron multiplier. These photons, normally in the UV range, are shifted to visible using a PEN wavelength shifter. Following a successful commissioning and data analysis stage, a full report on the first light detection, with photo-multiplier tubes, is given. Simultaneously, an SiPM array was prepared and therefore, the detector is going to enter soon in its second phase, ready for track reconstruction.

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