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## The Cherenkov Camera for the PBR mission

*Thursday 15 May 2025 15:25 (25 minutes)*

POEMMA-Balloon with Radio (PBR) is designed as a payload for a NASA suborbital Super Pressure Balloon that will circle over the Southern Ocean and a mission duration as long as 50 days. The PBR instrument consists of a 1.1 m aperture Schmidt telescope similar to the POEMMA design with two cameras in its focal surface: a Fluorescence Camera (FC) and a Cherenkov Camera (CC). The CC camera is mainly devoted to the observation of cosmic-ray induced high-altitude horizontal air showers (HAHAs) and search for neutrino-induced upward-going EAS. It will be made of 2048 SiPM with a surface of 3x3 mm<sup>2</sup> and a FoV of 12° by 6°, covering a spectral range of 320-900 nm. The CC camera is an innovative detector currently under construction. In this talk information about the current status will be given.

### Eligibility for "Best presentation for young researcher" or "Best poster for young researcher" prize

No

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