Overview of Cherenkov Telescope on-board EUSO-SPB2 for the Detection of Very-High-Energy Neutrinos

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- **What is this contribution about?**

- Characterizing the Night-Sky-Background (NSB), searching for air-showers produced by upward-going VHE tau-neutrinos below the limb and observing air-showers produced by cosmic rays above the limb.

- **Why is it relevant / interesting?**

- It is the first Cherenkov telescope operating from near-orbit altitudes and lays the groundwork for the future Cherenkov telescopes on space-based instruments such as POEMMA.

- **What have we done?**

- The camera electronics development are finished, and the performance of the camera has been very well studied with simulations.

- **What is the result?**

- Cherenkov telescope will be capable of characterizing NSB for future near-orbit observatories, observe up to 100 air showers per hour from cosmic rays above the limb and search for VHE tau-neutrinos below the limb.