

Micro-LIDAR for atmospheric studies for the 17m diameter MAGIC telescope

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A Micro-LIDAR is under construction at the MPI for physics in Munich. It is envisaged to be operated simultaneously with the 17m diameter MAGIC air Cherenkov telescope. The LIDAR will allow one to measure the aerosol height distribution in the atmosphere. This information can be used to correct for light losses in air showers due to scattering on aerosols and thus to improve the energy estimate of the primary particles measured by MAGIC. A 50cm diameter Al-mirror is used in the LIDAR together with a $2 \cdot 10^{-6}$ J/0.5ns pulsed Nd:YAG-laser at 532 nm. The status and the 1st measurements will be reported