SPACE EXPERIMENT "TUS" FOR STUDY OF ULTRA HIGH ENERGY COSMIC RAYS

V.V.Alexandrov (1),D.I.Bugrov (1),G.K.Garipov (1), V.M.Grebenyuk (2),M.F
(1) Moscow State University,(2) Joint Institute for Nuclear Research, Du

The telescope with mirror area 1.5 m^2, focal distance 1.5 m, with a retina of pixels (photo multipliers) in its focal plane is designed for observation of the Earth atmosphere fluorescence from orbit of the space platform “Resurs DK1” (apogee height- 650 km, perigee height –350 km). Cosmic ray particles of ultra high energy (energy more than 3x10^19 eV) produce fluorescent tracks in atmosphere that will be detected by the telescope. The goal of the experiment is to study ultra high energy cosmic rays and to reveal their sources.