SONDERKOLLOQUIUM

AM 6. NOVEMBER 2014 UM 9:00 UHR

IM SEMINARRAUM DES GUSTAV-MIE-HAUSES

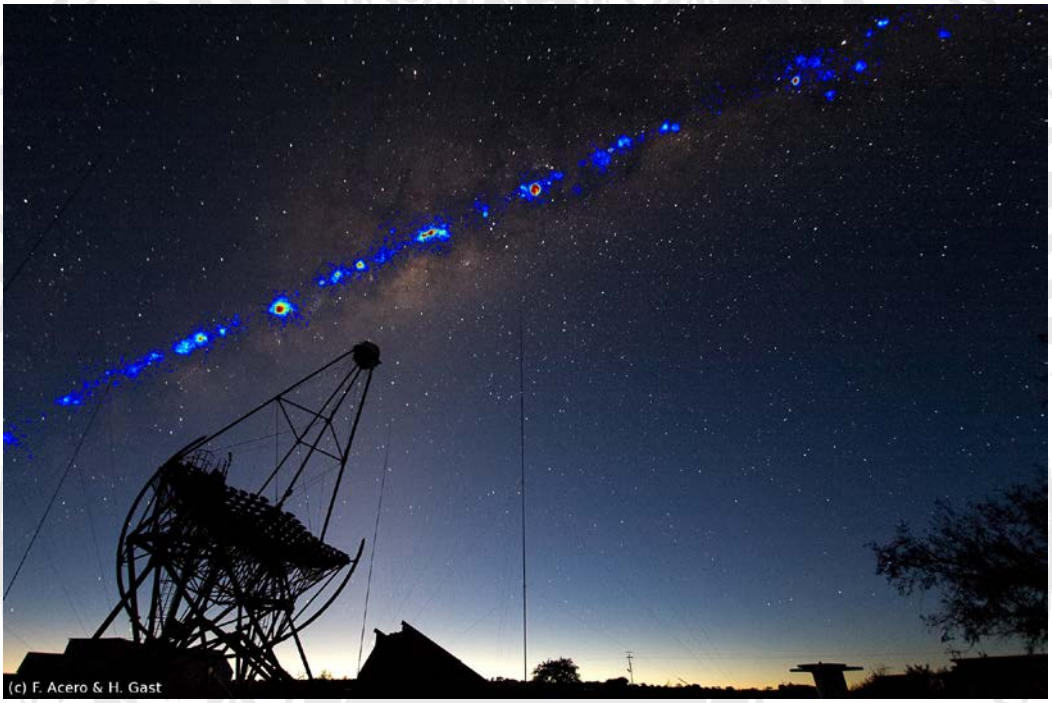

Photo montage showing the gamma-ray sky over Namibia, as measured by the four H.E.S.S. telescopes during the last years, superimposed onto an optical image, with one of the small H.E.S.S. telescopes in the foreground (Credit: H.E.S.S. Collaboration, Fabio Acero and Henning Gast)

Supernova Remnants – The Key to an Old Mystery?

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Our earth is constantly bombarded by energetic particles, mostly protons, coming in from outer space: the so-called cosmic rays. More than hundred years after their discovery the origin of these particles remains still a mystery and eludes a unique solution. Supernova remnants are prime candidates but the final confirmation is still missing. Gamma-rays, secondary products of cosmic accelerators, are a possible key to solve this mystery. They are not deflected by magnetic fields and therefore point directly back to their source. Experiments with imaging atmospheric Cherenkov telescopes have achieved a significant improvement in the identification and study of the spectral and morphological properties of these sources. An overview about the current state of research and possible strategies to solve the mystery are presented.