

## **The TeV and X-ray Characteristics of Mkn 501 as Measured in 1998 with the HEGRA Cherenkov Telescopes and RXTE**

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The HEGRA Cherenkov telescopes have been used in 1997 and in 1998 to intensively monitor the BL Lac object Mkn 501 on a regular basis. After a period of exceptional activity in 1997 of continuous flares and a mean flux roughly one order of magnitude stronger than in the preceding years the source returned in 1998 to a state of moderate flux levels with only very sparse flaring activity. We present detailed studies of the 1998 TeV characteristics of the source and focus on a comparison of its 1997 and 1998 TeV spectra. In June, 1998 we organized a joint HEGRA/RXTE multiwavelength campaign, characterized by exactly simultaneous observations with long integration times during approximately two weeks. A strong flare occurred during the campaign yielding a possible signature for time delays between the TeV and the X-ray emission as well as the high and low energy X-ray radiation. We highlight the results of the correlation studies and discuss the implications on emission scenaria and the intergalactic extinction of the TeV radiation by the Diffuse Extragalactic Background Radiation.