

An optical spectropolarimetric survey of highenergy blazars

Contributed Talk //

Active Galactic Nuclei (AGNs)



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At optical/UV wavelengths, blazar emission is a superposition of non-thermal (polarised) synchrotron emission from the jet, and thermal (unpolarised) emission from the accretion disc, host galaxy, broad-line region, etc. The emission from blazars can be complicated to model, as the nature of the particle populations, acceleration mechanisms, and resulting emission of the higher energy component (leptonic vs. hadronic models) is only partially understood. Optical spectropolarimetry provides a way to disentangle the non-thermal from the thermal contribution. placing better constraints on the lower-energy component of the observed emission. This, in turn, allows for constraints to be placed on the particle population producing the high-energy component as well. Here we present the results of an optical spectropolarimetric observation campaign of a selection of high-energy blazars undertaken with SALT. The nature and wavelength dependence of the polarisation, and its relation to the gamma-ray flux, synchrotron peak frequency, etc. will be highlighted.

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