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Spectroscopic Observations of Eclipsing Contact Binary Stars

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Abstract content
 (Max 300 words)

W Ursae Majoris-type variable stars are eclipsing contact (EC) binary stars. The component stars of an EC binary range in spectral type from mid-A to late-K and each is assumed to be a main-sequence star. The All Sky Automated Survey (ASAS) has discovered over 5300 EC stars. Most of these stars have not been classified previously as variables and therefore their physical properties, such as their mass ratio <i>q</i> and temperatures <i>T<sub>1</i> and <i>T₂</i> of the components, have yet to be determined. Spectroscopic data can be used to determine the temperatures and spectroscopic mass ratios of these ASAS EC stars. For a selection of EC stars from the ASAS database, spectroscopic data were obtained using the SpCCD spectrograph on the 1.9m telescope at the South African Astronomical Observatory in Sutherland. The results of the observations are presented.

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