

ULTRACAM OBSERVATIONS OF TWO ACCRETING WHITE DWARF PULSATORS

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Photometric observations of some dwarf novae have shown periodic variation, which has been attributed to non-radial pulsations of the white dwarf. These white dwarfs are thought to be the accreting analogues of the population of isolated pulsating white dwarfs known as ZZ Ceti stars. It has been shown that the parameters of the white dwarf can be determined with great precision through the study of these pulsations. In this talk I will discuss high time-resolution observations of two of these objects: GW Librae and SDSS J161033.64-010223.3. We took simultaneous multi-band observations of these systems in their quiescent states, and detect the strong pulsations modes reported by previous authors, as well as some additional low-amplitude periodicities. I will additionally discuss observations of GW Lib taken some months after outburst: the first time a dwarf novae containing a pulsating white dwarf has been observed in such a state. I discuss also a modulation in the luminosity of GW Lib with a period of approximately 2:1 hours, which we see in both the quiescent and post-outburst data. This has been previously observed, and its origin is unclear: it is apparently unrelated to the orbital period. We find this modulation to vary over the course of our observations in phase and/or period, and marginal evidence that the white dwarf pulsations are modulated on this long-period.