Extreme Helium Stars: a panorama

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Spectroscopically, extreme helium stars (EHes) are chemically peculiar B– and A–type supergiants in which Balmer lines are either extraordinarily weak or completely absent. They are rare: seventeen are known in the Galaxy. Neutral helium provides the dominant absorption component in their spectra; they are also comparatively rich in carbon, nitrogen and oxygen. Their rarity and the presence of heavily processed material on their surfaces point to an advanced and short-lived stage of stellar evolution. Attempts to understand this evolution have concentrated on measurements of their surface chemistry, which have to be linked to models of stellar evolution, and on their variability. The prevalence of variability, at least amongst the brighter fraction, has provided evidence for pulsational instability and hence for the stellar masses. This paper will review recent observational and theoretical work on the extreme helium stars, and attempt to place them within the context of other hydrogen-deficient stars.