Asteroseismology of the long-period hot B subdwarfs with CoRoT and Kepler

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The asteroseismic exploitation of long period, g-mode hot B subdwarf (sdB) pulsators has been a long sought objective undermined, thus far, by the difficulty of obtaining sufficiently precise and continuous time series data from the ground. Fast photometry from space appears as the only solution for gathering the appropriate asteroseismic data for this type of star, and has been recently achieved by the CoRoT and *Kepler* satellites. On this basis, using g-mode pulsations, we were able to determine the structural and core parameters of KPD 0629-0016 and KPD 1943+4058, two long-period hot B subdwarfs. This is the first time that g-mode seismology can be exploited quantitatively for stars on the extreme horizontal branch, all previous successful seismic analyses having been confined so far to short-period, p-mode pulsators.