
Circumbinary discs around post-AGB stars

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Abstract

Post-AGB stars with circumbinary discs all have companions: Hans Van Winckel has been telling us this for years. Post-AGB stars are also eccentric objects: Alain Jorissen and his team tell us this. Given that many post-AGB objects likely passed through a common envelope phase, or at least were close enough that tides have circularised their orbits, it is difficult to understand why they are now eccentric. In Cambridge we have been working on modelling post-common envelope circumbinary discs in the context of binary stellar populations. I shall present the first results of this work relating disc formation, properties and survival, as well as feedback on the orbit of the post-AGB binary at the centre of the discs. Can these discs really make post-AGB binaries eccentric or are they more sinister long-term threats to the survival of the binaries?

Keywords: Binaries, discs, eccentricity, planets.

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