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# Extended disks orbiting binary post-AGB stars

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## Abstract

Disks in Keplerian or quasi-Keplerian rotation around 4 binary post-AGB stars have been well detected by means of high-quality spectroscopic maps of CO line emission (namely, in the Red Rectangle, AC Her, IW Car and IRAS08544-4431) . The structure and dynamics of the disks is actually measured from those data, and the main physical conditions are deduced from model fitting. In 3 of them, the maps also show low-velocity outflows, very probably formed of gas escaping from the disk. In 3 other objects with similar properties (89 Her, IRAS19125+0343 and R Sct), only slow outflows are found in the maps, but compact (unresolved) disks probably exist too. Finally, observations with low angular resolution of wide samples of similar objects show, in almost all cases, peculiar line profiles that strongly suggest the systematic presence of rotating disks and slow outflows in them. The general properties of these structures are discussed, reviewing published data and presenting new ones. In particular, we discuss the angular momentum of the disk, which in some cases implies a significant change in the stellar orbit, provided that all the momentum comes from the binary system.

**Keywords:** discs, post, AGB stars

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