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ABSTRACT:

We have found strong evidence that an extended bipolar planetary nebula (PN), lying in the line-of-sight of the Galactic open cluster M37, is actually its physical member. We estimated both the PN physical properties and the properties of its progenitor from cluster studies. The progenitor mass has been found to be around 2.8 Msol. There are only a handful of such confirmed associations and each provides valuable additional data to the initial-to-final-mass relation. The nebula has a major axis of 445 arcsec and a kinematical age of around 80 kyrs- the largest ever determined for a PN- suggesting that PNe in clusters do not dissipate as fast as field PNe.