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**TITLE:** NGC 5189: Decoding its morphological pattern in three dimensions

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**ABSTRACT:**

Multi-polarity that characterizes Planetary Nebulae (PNe) is linked to a very active evolutionary history of low-mass stars, covering the period from the AGB phase up to the formation of PNe. In this category falls the PN NGC 5189, which exhibits multiple outflows in different directions, a bunch of knots and an overall puzzling S-shape. Although it has been characterized as “highly chaotic”, however it displays symmetries which can be revealed through its reconstruction in three- dimensions (3D). In this study, we present the preliminary results of the conducted 3D Morpho- kinematic modeling of NGC 5189, based on high-resolution echelle spectra and by employing the astronomical software SHAPE. According to the best fit model, NGC 5189 possibly consists of three distinct pairs of lobes, with expansion velocities in the range of 100-180 km/sec.