

Researchers confirm the discovery of a new planetary nebula

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(PhysOrg.com) -- Macquarie University PhD student Dimitri Douchin, and his adviser Orsola De Marco have played a pivotal role in the latest discovery of a new planetary nebula.

While observing at the Kitt Peak National Observatory's 2.1 m telescope, the pair was asked to provide confirmation that the object known as Kn 61 was indeed a planetary nebula, as suspected. As a consequence of this discovery the object has now been placed on the observation list for monitoring by NASA's planet hunting telescope Kepler over the

upcoming year.

Originally found by Matthias Kronberger, a member of an amateur astronomy group known as the Deep Sky Hunters (DSH), the role that Douchin and De Marco played was integral to ensuring the accuracy of the discovery.

There are roughly 3,000 planetary nebulae known in the [Milky Way Galaxy](#) and surveys continue to find more. DSH has recently found roughly 100 new very faint planetary nebulae, however the group lacks the telescope equipment to provide confirmation for any discovery made. The amateur group was asked to assist with finding additional planetary nebulae in the patch of sky that is currently being intensely monitored by NASA's Kepler [space telescope](#). Originally, only 3 planetary nebulae were known within this patch however with the help of DSH this number has doubled.

The team behind this discovery is hopeful that with a larger sample this information along with Kepler's extraordinary precision could offer answers to some long-contested questions, such as how planetary nebulae produce their fantastic shapes.

"With a sufficient sample of planetary nebulae, Kepler could help us understand these objects and may even put to rest the 30-year old debate about the origin of these nebulae," said Associate Professor De Marco.

Professor Travis Rector from the University of Alaska, Anchorage, has captured a beautiful image of the newly confirmed [planetary nebula](#) using the 8.1-m Gemini Telescope. Appearing as a lovely blue bubble, the picture also includes a bright star and spiral galaxy.

Provided by Macquarie University

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