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**TITLE:** Real-time evolution of IC 418

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**ABSTRACT:**

Planetary nebulae are a rapid phase of evolution. We here show that the young PN IC418 is evolving particularly fast, with an increasing excitation in the optical spectrum over the past century. Modeling shows that the star is heating at a rate of 25 Kelvin per year. The heating rate is a strong function of the core mass of the star, and it can be used to obtain the current stellar mass. IC 418 is a moderately carbon-rich nebula. The stellar mass therefore puts a strong limit on the mass range where sufficient third dredge-up takes place to cause carbon star formation, for a star with an accurately known metallicity which in turn sets the stellar age range for carbon star formation. We derive an age in excess of 3 Gyr, which is older than predicted in some of the stellar models