A&A 470, 1031 (2007)
DOI: 10.1051/0004-6361:20066452e

Astronomy & Astrophysics

Erratum

Asteroseismological constraints on the pulsating planetary nebula nucleus (PG1159-type) RX J2117.1+3412

A. H. Córsico[1,2,⋆], L. G. Althaus[1,2,⋆], and M. M. Miller Bertolami[1,2,⋆⋆]

[1] Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata, Paseo del Bosque S/N, (1900) La Plata, Argentina
e-mail: [acorsico,althaus,mmiller]@fcaglp.unlp.edu.ar
[2] Instituto de Astrofísica La Plata, IALP, CONICET-UNLP, Argentina

A&A, 461, 1095-1102 (2007), DOI: 10.1051/0004-6361:20066452

Key words. stars: evolution – stars: interiors – stars: oscillations – ISM: planetary nebulae: general – errata, addenda

1. Erratum

The value of the expansion age of the planetary nebula of RX J2117.1+3412 ($t_{\rm PN}$) that appears in the last column and last line in Table 2, and also in the last paragraph of Sect. 7 and fourth paragraph of Sect. 8 is wrong. The mistake originated because we erroneously employed the *diameter* of the nebula ($D_{\rm PN} = 5.3 \times 10^{13}$ km) instead of the *radius* ($R_{\rm PN} = D_{\rm PN}/2 = 2.65 \times 10^{13}$ km) to compute $t_{\rm PN}$. If we use the radius of the nebula and the expansion velocity of 31 km s^{-1}, we arrive at the correct value for the expansion age of the nebula: $t_{\rm PN} \sim 2.72 \times 10^4$ yr.

Note that the evolutionary timescale of the central star of RX J2117.1+3412 is $t_* \sim 2.5 \times 10^4$ yr (last column in Table 2). Therefore, by considering the correct value for the expansion age we found that $t_{\rm PN} \simeq t_*$. This result definitively solves the discrepancy between the RX J2117.1+3412 evolutionary timescale and the size of its nebula (see Appleton et al. 1993).

References

Appleton, P. N., Kawaler, S. D., & Eitter, J. J. 1993, AJ, 106, 1973

⋆ Member of the Carrera del Investigador Científico y Tecnológico, CONICET, Argentina.
⋆⋆ Fellow of CONICET, Argentina.