

An unusual face-on spiral in the wind of the M-type AGB star EP Aquarii (Corrigendum)

Ward Homan, Anita Richards, Leen Decin, Alex de Koter, Pierre Kervella

► To cite this version:

Ward Homan, Anita Richards, Leen Decin, Alex de Koter, Pierre Kervella. An unusual face-on spiral in the wind of the M-type AGB star EP Aquarii (Corrigendum). Astronomy & Astrophysics - A&A, 2019, 632, pp.C1. 10.1051/0004-6361/201832834e . hal-03124071

HAL Id: hal-03124071 https://hal.science/hal-03124071v1

Submitted on 12 Oct 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License

An unusual face-on spiral in the wind of the M-type AGB star EP Aquarii (Corrigendum)

Ward Homan¹, Anita Richards², Leen Decin^{1,3}, Alex de Koter^{1,5}, and Pierre Kervella⁴

¹ Institute of Astronomy, KU Leuven, Celestijnenlaan 200D B2401, 3001 Leuven, Belgium

e-mail: ward.homan@kuleuven.be

² JBCA, Department Physics and Astronomy, University of Manchester, Manchester M13 9PL, UK

- ³ School of Chemistry, University of Leeds, Leeds LS2 9JT, UK
- ⁴ LESIA (CNRS UMR 8109), Observatoire de Paris, PSL, CNRS, UPMC, Univ. Paris Diderot, France
- ⁵ Sterrenkundig Instituut "Anton Pannekoek", Science Park 904, 1098 XH Amsterdam, The Netherlands

A&A, 616, A34 (2018), https://doi.org/10.1051/0004-6361/201832834

Key words. radiative transfer – stars: AGB and post-AGB – circumstellar matter – submillimeter: stars – molecular data – errata, addenda

It has been brought to our attention that an error was made in the measurement of the continuum flux density (Sect. 3.1. and Fig. 1 in the original paper). The total continuum flux density within the 3σ contour was erroneously calculated as 1.33 Jy (being the total sum of the pixel intensities within this region), while in fact it is only 1.86 mJy. This implies that the deduction of the total dust mass that resides within this region ($\sim 5 \times 10^{-6} M_{\odot}$) was false. However, we cannot correct this estimate by performing the same analysis to the updated flux measurement because our estimate of the stellar continuum flux contribution of 2.27×10^{-2} Jy exceeds the updated value. Hence, we hereby retract all statements regarding the nature of the dust within the 3σ contour made in the second paragraph of Sect. 3.1. in the original manuscript. With the current values, we can at this point only state that either the stellar brightness and temperature (Winters et al. 2007) need to be better measured, or that the dust near the star is optically thick and prevents part of the stellar flux to penetrate all the way through to the observer.

Acknowledgements. We would like to sincerely thank Prof. A Zijlstra for bringing the abovementioned issue to our attention.

Reference

Winters, J. M., Le Bertre, T., Pety, J., & Neri, R. 2007, A&A, 475, 559