

Nomenclature of Galactic Wolf-Rayet stars

The nomenclature of Galactic Wolf-Rayet stars has been fixed since the 6th Catalogue (van der Hucht 1981), e.g. WR20. Subsequently discovered stars have been inserted via alphabetical identifications ordered by RA, as implemented for the 7th Catalogue and Annex (van der Hucht 2001, 2006), such as WR20a between WR20 and WR21.

Since the advent of efficient IR detectors the number of Galactic WR stars has greatly increased, necessitating a new scheme. A subset of the IAU Working Group for Massive Stars has been charged with new recommendations for the nomenclature for Milky Way WR stars, as follows:

1. All WR identifications up to 7th Catalogue/Annex remain unchanged since many are in widespread usage in the literature (e.g. WR20, WR20a).
2. All subsequent discoveries are switched from alphabetical (WRXXa, b) to numerical (WRXX-1, -2) identification, sorted by year/month of discovery, in RA order if multiple discoveries arise from a single source.
3. Multiple WR stars identified within a single source are indicated with CAPITAL letters (e.g. WR43a, b, c -> WR43A, B, C).

By way of example, three WR stars have been discovered since 2006 whose RA's are intermediate between WR20 and WR21. The first (discovered by Mauerhan et al. 2011) is assigned WR20-1, while two subsequent discoveries (from Roman-Lopez et al. 2011) are assigned WR20-2 and -3 (RA ordered). Since a few journal papers have referred to recently discovered stars using the former [alphabetical] scheme it is intended to retain such aliases, albeit solely for discoveries up to the end of Dec 2012 (WR20aa for WR20-2, WR20c for WR20-3).

Identifications for all known Galactic WR stars listed at the weblink have been updated to take into account these changes. Please contact Paul Crowther for advice on new additions.

Paul Crowther, Wolf-Rainer Hamann, Ian Howarth, Karel van der Hucht, Gregor Rauw

Dec 2012

Weblink: <http://pacrowther.staff.shef.ac.uk/WRcat>
Email: Paul.Crowther@sheffield.ac.uk