DIVISION IV / WORKING GROUP on MASSIVE STARS

CHAIR VICE-CHAIR PAST CHAIR BOARD Joachim Puls Claus Leitherer Stan Owocki Paul Crowther Margaret Hanson Artemio Herrero Norbert Langer Stan Owocki Gregor Rauw Nicole St-Louis Richard Townsend

PROCEEDINGS BUSINESS SESSIONS, 22 August 2012

The business meeting of the IAU Working Group on Massive Stars (under Division IV) took place during the GA in Beijing on August 22nd, and its major topics were (i) the re-structuring of the IAU Divisions and consequences for our Working Group, and (ii) a potential conversion of our WG into a Commission. The meeting was very well attended (including most members of the Board), and conducted by the chair of the WG, Joachim Puls.

1. Related activities during the General Assembly

He pointed out that stellar topics were very well represented during the GA, and that also the two sessions organized within our WG (a JD on Very Massive Stars – organized by Jorick Vink and colleagues – , and a SpS on the IR View of Massive Stars – organized by Yael Naze, Margaret Hanson and colleagues) were a success and well received. Before discussing the major topics of this meeting, Jo Puls reminded the audience on the upcoming elections of new OC-members and a new chair. (Five of the above OC-members will end their terms soon and need to be replaced or re-elected).

2. New IAU structure and consequences

The meeting continued with a presentation given by Jo Puls, concentrating on the changes which had been suggested (and approved at the end of the GA) regarding a new IAU Division structure, and potential consequences for our WG on Massive Stars (see also IAU Information Bulletin 109). Moreover, he summarized the outcome of the business meeting of Div. IV/V: (i) a new inter-divisional WG on *Solar-type Stars* has been applied for by Pascale Petit and colleagues, and (ii) it had been suggested that the Commissions within Div. IV and V (to be unified within the new Division G, 'Stars and Stellar Physics', with approx. 2100 members) may evaluate their present positions and goals, and might consider a merging with other Commissions to strengthen their impact.

Because of the upcoming re-evaluation of all present Commissions and Working Groups by the new 'Division Steering Committee' (DSP), Jo Puls pointed out that there is a lot to consider and discuss within the OC and the Working Group, accounting for the fact that within the new concept Commissions and WGs can be created and terminated on very short terms, if they turn out to be no longer efficient or useful.

119

Jo Puls reminded the audience that our WG has been existence for roughly 15 years, comprising approx. 400 members, including a large number of young scientists who are not IAU members (which is possible for WGs, but not for Commissions). However, the typical life-time of a WG was originally intended to last for typically one triennium only, and that each WG basically needs to reapply for continuation every three years. So far, this was not problematic, and, given the wide-spread activities of our WG, only a more or less formal step. Within the new concept, the rules will be more strictly enforced, with frequent evaluations, and reapplications to keep the WG status might become more difficult than in the past.

3. Turning into a Commission?

Insofar, the question (re-)appears whether we should apply for turning our WG into a Commission, even though this will not guarantee a longevity. Besides the immediate advantage that there would be no need to reapply every three years, there would be also certain disadvantages, namely that the Commission members now *need* to be IAU members, and that the number of these members would be thus much lower than present, leading to potentially diminished impact of the new Commission compared to others.

Indeed, such a change to Commission status had already been suggested by former President of Div. IV, Chris Corbally, at the end of 2011, but was delayed because of feedback from other Commissions within Div. IV who suggested to wait after the GA until the new structure has been settled. Thus, some action will be required soon, and the remainder of the business meeting was devoted to discussions on pros and cons.

The various contributions can be summarized as follows: (i) Before deciding on requesting a Commission status, our WG needs at first to reevaluate goals, focus and vision, and only then organize the structure. (ii) Though until now it was quite difficult to admit new IAU members (regarding the large number of non-members in our WG), this might become easier due to new IAU regulations on the contributions from the member countries. (iii) It might become necessary to widen the focus and to enlarge the community (debated). (iv) Agreement was reached that there are more advantages than disadvantages when becoming a Commission, particularly because Commissions (contrasted to WGs) have the right to vote for IAU symposia, and the Commission Chair is a member of the Division OC.

At the end of this discussion, it was agreed that our future philosophy and and the decision whether to apply for Commission status needs to be discussed soon within the OC and thereafter with the WG members.

4. Other business

After a question regarding the status of the next 'massive star conference' in Greece, Jo Puls explained that this will take place in June next year (without IAU support, but supported by other sponsors found by the LOC). Other details can be found on the corresponding web page http://a2omega.astro.noa.gr.

Paul Crowther finally raised the issue of the nomenclature of Galactic Wolf-Rayet stars. Historically (van der Hucht 1981, SSRv 28, 227) these were listed in RA order, from WR 1 through WR 158. Initially, only a few additions were made, named WR20a between WR20 and WR21. However, the WR catalog has since increased fourfold (548 as of April 2012). Subsequent additions have included WR20aa between WR20 and WR20a, so a (future) new detection between WR20 and WR20a and WR20aa would be assigned WR20aaa, which will quickly become unsustainable. An alternative approach is therefore required. Paul Crowther suggested that a subset of our WG OC should further investigate this issue (Current WR catalog

http://www.pacrowther.staff.shef.ac.uk/WRcat/), which was agreed upon.

The business meeting was officially closed after roughly 1.5 hours, but a subset of the audience had some further and lively discussions after the meeting in the beer-garden 'Beer Time', initiated (after some beers) by Olivier Schnurr, and centered around questions whether our WG is focused enough, and what can be improved.

Joachim Puls chair of Working Group