



Active B Stars Newsletter

March-April 2024



Dear colleagues,

Starting in 2024, we are launching a new [IAU Division G WG Active B Stars](#) newsletter series, which will also be part of the WG [website presentation](#). This newsletter will inform you at regular bimonthly intervals about seminars and lectures organized by our WG, about important upcoming assemblies, conferences, workshops or seminars within the field of our working group, our division or beyond, or about other important, relevant or interesting things related to the subject of our working group.

We hope that all the activities within our working group will contribute to an increased interest not only in the field of active B-type but hot stars in general, as an important and super-important research area in the field of stellar astronomy. Thank you for any suggestions and contributions to the work of our group throughout this and future years. We look forward to working together in 2024!

The IAU WG Active B Stars Organizing Committee,
Yaël Nazé, Alex C. Carciofi, Mary Elizabeth Oksala, Dominic Bowman, Robin H. D. Corbet, Alexandre David-Uraz, Robert Klement, and Petr Kurfürst

WG matters:

- Towards solving an old stellar puzzle:
dissecting the origin(s) of blue supergiants

Seminar by Dr. Athira Menon from Instituto de Astrofisica de Canarias
March 27th 2024, 4:30 CET

Zoom link: <https://clu.zoom.us/j/94187793151>

- Recordings of previous seminars can be found on
<https://www.youtube.com/@iauwgabs>

Conferences:

- Bfields-2024, Magnetic Fields from Clouds to Stars

Monday, March 25, 2024 - Friday, March 29, 2024
Mitaka Campus, National Astronomical Observatory of Japan, Tokyo, Japan

Website: <https://bfields2024.wixsite.com/bfields2024>

The aim of the conference is to share and discuss recent observational and theoretical results on the magnetic properties of clouds to molecular filaments, cores, disks, and stars. In particular, the conference will provide the opportunity for researchers in both fields of star formation and stellar evolution to meet and discuss the interconnection between the magnetic field and the various physical processes at different scales from clouds to stars.

- Physics of Extreme Massive Stars

June 24- 28, 2024, Rio de Janeiro, Brazil

Website: <https://stelweb.asu.cas.cz/MassiveStars2024/>

The goal of the Physics of Extreme Massive Stars conference is to bring together scientists working in a range of subjects related to massive star research. It is the final conference of the European funded POEMS collaboration. It will address the processes that trigger mass loss in massive stars during extreme phases of their evolution, the study of the environments of massive stars on small and large scales and their binarity.

Important dates:

- March 22, 2024 – Abstract submission deadline
- April 19, 2024 – Announcement of acceptance of contributed talks
- May 26, 2024 – Final registration deadline (and abstract submission for poster presentations)

There is no registration fee to attend the conference (financial support from the POEMS project).

● **Fundamentals of Stellar Outflows:**
Celebrating and Amplifying the Scientific Life of Stan Owocki

Leuven, Belgium, 8- 12 July 2024

Website: <https://fys.kuleuven.be/ster/events/conferences/2024/stanfest>

Over the past 4 decades, Professor Stanley P. Owocki and his collaborators have made great strides in understanding the physical processes that control the structure of stellar outflows, most particularly the line-driven winds of massive stars. On the occasion of his formal retirement from the Bartol Research Institute of the University of Delaware, it is fitting to review these fundamental advances and consider the prospects they provide for continued progress. The broad scope of this meeting is suggested by the word cloud derived from the titles of Stan's many publications, as well as from his many collaborations over the years.

Important dates:

- 2024 February 5 – Registration and abstract submission opens
- 2024 March 29 – Deadline for submission of contributed talk abstracts
- 2024 April 12 – Announcement of selected talks
- 2024 May 10 – Deadline for poster abstracts
- 2024 2024 May 31 – Registration closes & Payment deadline

● **41st LIAC: The eventful life of massive star multiples**

Liège, Belgium, 15- 19 July 2024

Website: https://www.liac41.uliege.be/cms/c_17843766/en/liac41

An in-person WG meeting will take place on the friday afternoon (with additional slots for presenting scientific results and time for discussion) !

Lasting a full week, this colloquium proposes to follow in detail these massive stellar couples, from their formation to their afterdeath as remnants, and to examine the various aspects of the binary interactions at all stages. The colloquium will start on the formation of the massive multiple systems, trying to assess how such giants are born under different conditions (turbulence, magnetic fields, metallicity,...) and which observational constraints were already achieved in this field. The colloquium will continue by examining the different interactions (tides, mass transfer, common envelope, dynamical ejection, merging...) and their consequences on the subsequent evolution of these stars.

Important dates:

- 15 March 2024 – Abstract submission deadline
- 15 April 2024 – Announcement of selected talks and posters
- 15 May 2024 – Deadline for registration

● **BeXRB 2024**

Cape Town, South Africa, July 31 - August 2, 2024

Website: https://www.liac41.uliege.be/cms/c_17843766/en/liac41

Be stars themselves still represent a challenge to modern astrophysics. When in binary systems, their observation and modelling do not only shed light into our knowledge of the peculiarities of Be stars, but also into a variety of topics of great interest, like physics of accretion, matter and light in extreme conditions, and massive binary star evolution as progenitors of NS-NS or NS-BH systems, primary targets of GW detection in the present times. Therefore, the intensive study of these objects by the scientific community must keep at the good pace that we have witnessed in the last decade. BeXRB 2024 will try to contribute to push knowledge in the field, promote collaborations, and offer lots of networking options among scientists from very different fields of research.

Important dates:

- 22 March 2024 – Abstract submission deadline
- 17 May 2024 – Third announcement and preliminary program
- 14 June 2024 – Deadline for registration, final announcement and final program

● **The BRITE Side of Stars**

Celebrating the 10th Anniversary of BRITE Constellation

August 20 - 23, 2024, Vienna, Austria

Website: <https://britestars.univie.ac.at/home/>

After launch of the first BRITE nanosatellites in 2013 and having established a fully operational constellation of five BRITEs in 2014, we want to celebrate this ground breaking space project focused on bright stars that established nanosatellites as powerful research tools. It provided excellent data for the international scientific community during 10 years and resulted hitherto in 228 publications (see BRITE Science in the link provided on the official [BRITE website](https://britestars.univie.ac.at/home/)).

Important dates:

- May 1, 2024 – Abstract submission deadline
- June 1, 2024 – Contributions decision announcement
- June 15, 2024 – Early registration deadline (registration fee 110 €, 150 € after that)
- The registration fee for on-line participation amounts to 50 €

Please register for the conference also in case you wish to attend without an oral or e-poster contribution.

● Hot Stars 2024: Life with Circumstellar Matter

October 14-19, 2024, Almaty, Kazakhstan

Website: <https://conf.astrokaznu.kz>

The conference will focus on stellar objects at any evolutionary stage that include early-type stars with signs of circumstellar gaseous and dusty material. This definition includes such classes of object as Herbig Ae/Be, classical Be, Vega-type, Wolf-Rayet stars, Proto-Planetary Nebulae, Luminous Blue Variables, other objects with the B[e] phenomenon, and any other related objects.

Important dates:

- January 1, 2024 – Early registration opens (registration fee \$200/100 – regular/student)
- April 16, 2024 – Late registration begins (registration fee \$250/150 – regular/student)
- August 15, 2024 – Abstract submission deadline
- August 20, 2024 – Preliminary scientific program published
- October 1, 2024 – Final program published

For questions, please contact the organizers via email at al.stars2024@gmail.com.