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Theory and Observation of Active B-type Stars

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Deadline for manuscript submissions: **15 December 2022**

Message from the Guest Editors

Dear Colleagues,

Active B-type stars are defined by their characteristic emission formed in a dense environment. Among them are the classical Be stars, which are surrounded by ionized gaseous disks, and B[e] stars, whose disks are so dense that even molecules and dust can form within them. The variability of active B-type stars seen on various time and spatial scales is often connected to the formation and dissipation of these disks. Although the possible roles of radiation, rotation, pulsation, binarity and magnetic fields in pulling material off the stars were explored in detail over the past decades, the relevant physical processes involved in the formation of sustainable disks and their dynamical evolution are still unclear and a matter of debate.

This Special Issue intends to provide a comprehensive update on the state of knowledge in the field of active B-type stars. It combines reviews and selected contributions on recent groundbreaking advances in the comprehension of these peculiar objects from both a theoretical and an observational perspective. These new insights form the basis for exploring complex physical phenomena to verify the different scenarios proposed for the origin, evolution and variability of the circumstellar environment of the diverse classes of active B-type stars.



mdpi.com/si/114671

Specialsue





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Message from the Editor-in-Chief

Galaxies provides an advanced forum for studies related to astronomy, astrophysics, and cosmology, including all of their subfields. Different formats, such as specialized research articles, reviews, communications and technical notes are welcomed. Manuscripts containing original and creative research proposals and ideas are especially appreciated. We encourage scientists to publish their astronomical observations and theoretical results in as much detail as possible. There is no restriction on the paper length and full experimental and methodological details, as applicable, should be provided. All papers will be peer reviewed promptly. On behalf of the distinguished members of the editorial board, I extend my welcome to all researchers working on these subjects to contribute to *Galaxies*.

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