

Inter-Division IV/V WG on Active OB Stars

CHAIRPERSON: Stan Owocki

ORGANIZING COMMITTEE: Conny Aerts, Juan Fabregat,
Doug Gies, Huib Henrichs, David McDavid, John Porter,
Thomas Rivinius. **Advisors:** Gerrie Peters, and Stan Štefl

1. Working Group Focus

Our group studies active early-type (OB) stars, with historical focus on classical Be stars, but extending in recent years to include Slowly Pulsating B-stars (SPB), Beta-Cephei stars, the strongly magnetic Bp stars, Luminous Blue Variable (LBV) stars, and B[e] stars. An overall goal is to understand the nature, origin, and consequences of this activity, in terms of both the stellar structure and evolution, as well as the distribution and dynamics of circumstellar material and mass outflows.

2. Scientific Meetings

Research activity within our WG during the past triennial period of 2002-2005 was highlighted by 3 topical meetings:

(a) “The Nature and Evolution of Disks around Hot Stars”, held in July 2004 in Johnson City, Tennessee, USA, with SOC consisting of Rico Ignace (chair), Jon Bjorkman, Joe Cassinelli, and Ken Gayley.

(b) Workshop on “Stars with the B[e] Phenomenon”, held in July 2005 on the Island of Vlieland, The Netherlands, with SOC consisting of Michaela Kraus (chair), Francisco de Araujo, Vera Arkhipova, Jon Bjorkman, Karen Bjorkman, Roberta Humphreys, Georges Meynet, Anatoly Mirochichenko, Antonella Nota, and Phillippe Stee.

(c) “Active OB Stars: Laboratories for Stellar and Circumstellar Physics”, held in Sapporo, Japan at the end of August 2005, with the SOC co-chaired by Stan Štefl and Stan Owocki and SOC members Conny Aerts, Dietrich Baade, Jon Bjorkman, Mike Marlborough, Ignacio Negueruela, Atsuo Okazaki, Phillippe Stee and Rich Townsend. The conference honored the many scientific contributions to our field by Ryuko Hirata, Anne-Marie Hubert, and Mike Marlborough. The proceedings will be dedicated to the memory of John Porter (see below).

A common theme in all three meetings was the origin of the circumstellar disks inferred in both Be and B[e] stars, with particular focus on the relative roles of rapid (perhaps near-critical) stellar rotation, stellar pulsation, and stellar magnetic fields.

In addition to these topical meetings, there was a one-day meeting of the WG held at the 25th IAU General Assembly in Sydney, consisting of both a business and science session. A summary of the outcome is given in volume 37 of the Be-Star Newsletter, which is available online via the link given below.

3. Newsletter

Developments in our field are reported in the Be-Star Newsletter, for which the electronic version is updated as needed upon submission of new materials, and printed editions published bi-annually. Geraldine Peters is editor-in-chief of the Newsletter, Doug

Gies manages the hard-copy publication, and David McDavid is the webmaster. The URL is:

<http://www.astro.virginia.edu/~dam3ma/benews/>

4. Community Loss

In June 2005, the members of our Working Group were saddened to learn of the sudden death of John Porter, at age 37. A valued member of our Organizing Committee, John was an innovative researcher on Active OB stars, authoring numerous influential papers, including a recent general PASP review on Be stars. Our community will sorely miss his keen insight, his gentle humor, and his warm, friendly face.

Stan Owocki
Chairperson of the Working Group