

Massive Star Formation: 3rd call

Contributed by Administrator
Tuesday, 15 May 2007
Last Updated Tuesday, 12 June 2007

The conference:

"MASSIVE STAR FORMATION: OBSERVATIONS CONFRONT THEORY"
will be held from September 10th to 14th 2007 in Heidelberg/Germany.
Additional information on this meeting can be found at
<http://www.mpia.de/MSF07/>

The registration is open (accessible from above WWW-address), and the early registration deadline is extended to 15th of June 2007. All talk request received until then will be considered by the SOC. Later registrations can always present posters.

The conference fees are:

- 250 Euro: Early registration (before May 31, includes reception, proceedings and coffee breaks)
- 300 Euro: Late registration (includes reception, proceedings and coffee breaks)
- 25 Euro: Conference dinner (optional)
- 15 Euro: Boat trip on the Neckar (optional, Friday, afternoon, price may slightly change depending on the demand).

For accommodation, rooms in several hotels of different class and style have been reserved. You can head directly to the booking from our web-page.

Objectives

Although high-mass stars shape the interstellar medium, star clusters and whole galaxies tremendously throughout their whole lifetime, the actual massive star formation processes are still poorly understood. This meeting will gather the astrophysical community working theoretically and observationally in the field of massive star formation. Various theoretical concepts for the formation of massive stars are currently discussed, and it is important to derive predictions which can be tested observationally, and which discriminate between the various models. Furthermore, new observations, ranging from cm and (sub)mm wavelengths to the Infrared and X-ray regime, reveal intriguing features requiring theoretical explanations.

Observationally, the Galactic plane surveys from Spitzer (GLIMPSE and MIPS GAL) are expected to reveal many new insights, the submm regime will be exploited with new instruments like APEX and the SMA, existing observatories are significantly upgraded (e.g., PdBI, IRAM30m, JCMT, VLA, VLTI), CARMA is coming online soon, and new telescopes like ALMA, Herschel, and LBT are at the horizon.

From the theoretical/modeling perspective, the ever-increasing computational power allows to incorporate more and more physical and chemical parameters important for the formation of massive stars and their surrounding clusters. It is an important goal of this meeting that the different "disciplines" in high-mass star formation research interact, and together try to solve the outstanding questions of massive star formation.

The format of the meeting should stress new results. A few selected reviews will be given outlining the current status of the several sub-fields, but the major focus will be on the presentation and discussion of the recent results and the implications for the formation of massive stars. There will be ample room for contributed talks and poster presentations. Controversial discussion to constrain the potential and limitations of observations, theory and modeling will be highly encouraged. Furthermore, selected open panel discussions about the hottest current topics may even better constrain the directions the massive star formation community should head for.

Topics

- The earliest stages of high-mass star formation: Initial conditions and early collapse
- Properties and evolution of massive protostars
- Clustered massive star formation
- Feedback (outflows, turbulence, dust and gas bubbles, ionization)
- Massive Star Formation in a Galactic Context
- Extragalactic star formation
- Future perspectives for observational, theoretical and modeling tools

Scientific Organizing Committee

- Henrik Beuther (Chair)
- Michael Burton
- Ed Churchwell
- Guido Garay
- Thomas Henning
- Paul Ho
- Stan Kurtz
- Karl Menten

- Frederique Motte
- Francesco Palla
- Jonathan Tan
- Malcolm Walmsley

Review speaker & tentative titles

- Lori Allen: Clustered star formation
- Kate Brooks: Observational overview
- Jay Gallagher: Extragalactic star formation
- Oliver Krause: Surveys of the Galactic plane
- Mordecai-Mark Mac Low: Feedback
- Barbara Whitney: Radiative transfer processes in MSF
- Friedrich Wyrowski: Initial conditions
- Harold Yorke: Theoretical overview

Invited speaker & tentative titles

- Tom Abel: The first massive stars
- John Bally: Outflows
- Bob Benjamin: Galactic structure and star formation rate
- Arian Bik: Infrared view of disks
- Leo Blitz: From atomic to molecular gas
- Ed Churchwell: Bubbling galactic disk
- Lise Deharveng: Triggered star formation
- Doug Gies: Binaries
- Eva Grebel: Star formation in dwarf galaxies
- Lincoln Greenhill: Orion revisited
- Eric Keto: Accretion through HCHII regions
- Richard Klein: Future of theory and simulations
- Mark Krumholz: Turbulent accretion models
- Susanna Lizano: Theory of HCHII
- Karl Menten: Masers
- Frederique Motte: Submm surveys of massive star-forming regions
- Alison Sills: Stellar collision theory

- Steve Stahler: Competitive accretion and coalescence
- Juergen Steinacker: 3D radiative transfer
- Floris v.d. Tak: Chemistry
- Andrew Walsh: Surveys of southern hot cores
- Sidney Wolff: Rotation and evolution of angular momentum
- Qizhou Zhang: cm to submm view of disks

Panel discussions & confirmed participants

- Theoretical models and observational constraints for high-mass star formation (moderator: H. Zinnecker): Chris McKee, Ian Bonnell, ...
- What is a massive protostar? Theoretical definitions, observational criteria and evolutionary sequence (moderator: N. Evans): ...

Location

This conference will be held in the Heidelberg Convention Center (Kongresshaus Stadthalle Heidelberg) located directly in the center of downtown Heidelberg overlooking the river Neckar.

The venue is a beautiful old (1903) building equipped with all modern conference facilities. Due to its central location, hotels, touristic sights, the castle and numerous restaurants are all within walking distance.

Heidelberg hosts one of the oldest Universities of Europe, and it has ever been an academic center over a wide field of research areas. The city has five astrophysical institutes, and a large community is interested in star formation research.

Additional information about location, travel, tourism and the city of Heidelberg can also be found on our web-page <http://www.mpia.de/MSF07/>. If you have not received the announcements directly yet and want to be added to the email-list for additional announcements about the conference, just write an email to [beuther\(at\)mpia.de](mailto:beuther(at)mpia.de).

Hope to see you soon in Heidelberg!