Astronomical News

Announcement of the Joint ESO, CTIO, ALMA/NRAO and Universidad Valparaíso Workshop

The Interferometric View on Hot Stars

2–6 March 2009, Viña del Mar, Chile

One of the research fields in which interferometry excels has turned out to be hot star astrophysics. New results have often been quickly adopted by the community, providing important quantitative constraints in frontline research topics:

– Several hot stars have been shown to be very rapidly rotating, in a regime where geometric deformation and gravity darkening become important.

– Stellar winds have been resolved, like those of η Carinae and Wolf-Rayet stars.

– Circumstellar discs have been observed across a wide range of phenomena, such as gaseous accretion discs around young Herbig stars, decretion discs around Be stars, and dusty discs around B[e], and also Herbig stars.

While some of these results, like the critical rotation of Achernar and other stars, were a complete surprise, others, like the prolate wind of η Carinae, have been anticipated by theoretical research, but were hardly expected in the clear and unambiguous form in which they were finally observed.

The meeting aims at bringing together both hot star and interferometry expertise, both observationally and theoretically, to review the progress made, as well as to outline current problems in hot star research that are expected to benefit most from interferometric observations.

Oral sessions during the meeting will be held on:

– High angular resolution techniques;

– The stars (including Cepheids);

– Stellar winds;

– Circumstellar discs;

– Hot binaries;

– Explosive stars;

and a poster session is foreseen.

Confirmed speakers include: Alex Carciofi, Olivier Chesneau, Asif ud-Doula, William Hartkopf, Stefan Kraus, Ronald Mennickent, Antoine Mérand, Georges Meynet, Florentin Millour, Coralie Neiner, Stan Owocki, Jayadev Rajagopal, Markus Schöller, Nathan Smith and Christopher Tycner.

On the Thursday and Friday before the meeting (26–27 February 2009), an interferometry primer will be held, mainly intended for students, but open to all workshop participants, provided there is enough space. The scope of the primer is to enable attendees without experience in interferometry to develop the first steps at judging the results presented during the meeting and thus develop ideas for discussion at the meeting. This primer will take place at ESO’s premises in Vitacura, Santiago, and confirmed lecturers include: Andreas Quirrenbach, Olivier Chesneau, Markus Schöller, Antoine Mérand, Carla Gil, and Jean Baptiste Le Bouquin.

The workshop will take place in Viña del Mar, on the Pacific coast of Chile, about 100 km west of Santiago. Viña is famous as a holiday resort well beyond Chile. Since the meeting will take place just after the end of the Chilean holiday season, most of the tourist crowds will have returned home, but pleasant coastal weather is expected. Located just south of Viña del Mar across the city border is Valparaíso, one of Chile’s most important harbours and a UNESCO world heritage site for its historical importance, natural beauty, and unique architecture.

For further information on the workshop, please refer to http://www.eso.org/sci/meetings/IHOT09/ or contact ihot09@eso.org.

The registration deadline is 17 December 2008.

The Scientific Organising Committee consists of: Olivier Chesneau, Michel Curé, Doug Gies, Christian Hummel, Stan Owocki, Andreas Quirrenbach, Thomas Rivinius, Markus Schöller and Gerd Weigelt.

Paranal observatory by moonlight.