#### FIRST ANNOUNCEMENT

**ESO Workshop on** 

## Cyclical Variability in Stellar Winds –

recent developments and future applications

14-17 October 1997

ESO Headquarters Garching bei München, Germany

Variability is a fundamental property of stellar winds. In recent years it has become clear that in many cases the observed variations show a cyclical behaviour. This is a property that hotand cool-star winds seem to have in common, although the physical mechanism driving the wind is different.

Topics to be covered include:

- Wind acceleration mechanisms
- · Observations of cyclical wind variability (hot and cool stars)
- · Latest solar wind results
- Variability in pre-main-sequence winds
- · Processes affecting the emergence of the wind
- Modelling time-dependent behaviour stellar winds
- MUSICOS 1996 results
- Future developments

Scientific Organising Committee: T. Böhm (Germany), A. Cameron (UK), C. Catala (France), L. Hartmann (USA), H. Henrichs (The Netherlands), L. Kaper (Germany), H. Lamers (The Netherlands), K. MacGregor (Chair, USA), S. Owocki (USA), J. Puls (Germany), O. Stahl (Germany) Local Organising Committee: A. Fullerton, L. Kaper (Chair), C. Stoffer.

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## **New ESO Preprints**

(November 1996 - February 1997)

#### **Scientific Preprints**

- 1198. J. Manfroid and G. Mathys: Variations of the Ap Star HD 208217. AA.
- 1199. L. Kaper, J.Th. van Loon, T. Augusteijn, P. Goudfrooij, F. Patat, L.B.F.M. Waters, A.A. Zijlstra: Discovery of a Bow Shock Around Vela X-1. ApJ Letters.
- 1200. R. Gredel: Interstellar CH+ in Southern OB Associations. AA.
- 1201. J. Rönnback and P.A. Shaver: A Distant Elliptical Galaxy Seen Through a Foreground Spiral. AA.

- 1202. P. Ferruit, L. Binette, R.S. Sutherland and E. Pécontal: Modeling Extragalactic Bowshocks. I. The Model. AA.
- 1203. G. Mathys and S. Hubrig: Spectropolarimetry of Magnetic Stars. VI. Longitudinal Field, Crossover and Quadratic Field: New Measurements. AA.
- 1204. M. Victoria Alonso and D. Minniti: Infrared Photometry of 487 Sources in the Inner Regions of NGC 5128 (Cen A). ApJ Suppl.
- 1205. I.J. Danziger and R. Gilmozzi: The Final Optical Identification Content of the Einstein Deep X-Ray Field in Pavo. AA.
- 1206. G. De Marchi and F. Paresce: The IMF of Low Mass Stars in Globular Clusters. *ApJ* Letters.
- 1207. G. Mathys and T. Lanz: The Variations of the Bp Star HD 137509. AA.
- 1208. P.-A. Duc, I.-F. Mirabel and J. Maza: Southern Ultraluminous Infrared Galaxies: an Optical and Infrared Database. AA.
- 1209. A.A. Zijlstra, A. Acker and J.R. Walsh: Radial Velocities of Planetary Nebulae Towards the Galactic Bulge. AA.
- 1210. T.R. Bedding, A.A. Zijlstra, O. von der Lühe, J.G. Robertson, R.G. Marson, J.R. Barton and B.S. Carter: The Angular Diameter of R Doradus: a Nearby Mira-like Star. M.N.R.A.S.
- 1211. S. Randich, N. Aharpour, R. Pallavicini, C.F. Prosser and J.R. Stauffer: Lithium Abundances in the Young Open Cluster IC 2602. AA.
- 1212. D. Baade and H. Kjeldsen: A Spectroscopic Search for High Azimuthal-Order Pulsation in Broad-Lined Late F- and Early G-Stars. AA.

#### PERSONNEL MOVEMENTS

#### International Staff (1 January – 31 March 1997)

#### **ARRIVALS**

#### **EUROPE**

WICENEC, Andreas (D), Archive Information Designer & Engineer
WOLFF, Norbert (D), Control Engineer
SILVA, David (USA), Head of User Support Group
BARZIV, Orly (GR), Student
ROSATI, Piero (I), Fellow
DUDZIAK, Gregory (F), Coopérant
PIEPER, Holger (D), UpA Optical Detector Team

#### CHILE

CANNON, Russell (GB/AUS), Senior Visitor

#### **DEPARTURES**

#### EUROPE

VAN DEN BRENK, John, Detector Engineer
VON DER LÜHE, Oskar (D), Experimental Physicist/
Astronomer
SACRÉ, Philippe (F), Mechanical Engineer
DUDZIAK, Gregory (F), Student
VAN LOON, Jacobus (NL), Student
PIEPER, Holger (D), Student
CÔTÉ, Stéphanie (CDN), Fellow

# **Translation of Speech by Foreign Minister Mr. José Miguel Insulza**

Your Excellency, Don Eduardo Frei Ruiz-Tagle, Your Majesties King Karl XVI Gustaf and Queen Silvia of Sweden, Mr. President of the ESO Council, Mr. Director General of ESO, Senators, civil, military and church officials, Members of the Swedish delegation, Members of the ESO Council, ladies and gentlemen,

It is a great honour for me to represent the Chilean Government in this ceremony and to share with you my feeling of excitement and hope as we take part in this foundation ceremony of ESO's at Cerro Paranal. This feeling is, first of all, based upon the importance of the project that we inaugurate today. The VLT/VLTI telescope already described by the President of the ESO Council and by the Director General of ESO, is not only an expression of the most modern technology ever used in astronomy. It is also an opportunity to deepen our knowledge of the Universe and thus be able to answer the questions that have occupied mankind since its origin. In this sense, over and above the significant cost entailed by the project, it will be a

milestone for the development of astronomy at a national and global level.

My satisfaction becomes even greater, when considering the long and winding path that Chile and ESO had to follow these last years, to reach this place and this occasion. We all know of the difficulties encountered and the misunderstandings, which have now been happily overcome, but which at some point threatened the completion of this project.

However, I believe it is important to say that during that process the Government permanently supported ESO, in order to enable the Organisation to continue developing and extending its activities in Chile. We did this not only because of the international commitment undertaken by the State and to follow Chilean tradition in honouring engagements of international treaties but also because we thought that the development of ESO's activities in the country, within a clear legal frame, would not only benefit world science, but also Chile's scientific development in its most important regions.

Our point of view is validated today, since the Paranal Observatory will not only benefit ESO's activities but will also redound to the benefit of Chilean scientists who will thus have access to a facility which would otherwise have been completely beyond their reach.

For this reason, this ceremony, which follows the signing of the Instruments of Ratification and Approval of the Interpretative, Supplementary and Amending Agreement of the 1963 Convention, constitutes not only the end of a difficult process, but also the beginning of a new relationship of co-operation and understanding between Chile and ESO, which is a mature, consolidated and equal relationship in which both parties benefit.

The consolidation of the legal-political relationship between Chile and ESO warrants a steady development for ESO's activities, within a framework of mutual benefit and also warrants the extension of these activities in the future.

Furthermore, through the recognition of the legitimate aspirations of the national sectors more directly involved in ESO's activities, an equal relationship is established, because the acknowledgement of

the rights of Chile and its citizens in labour and scientific matters constitute an adequate counterpart to Chile's contribution to ESO.

By establishing permanent bodies of co-operation and for the resolution of controversies between Chile and ESO, the Organisation becomes closely linked to the scientific and technological development of the country.

Finally, this relationship has pilot character in several aspects, such as environmental protection, rights of Chilean workers in foreign public organisations and the rights of the national scientific community. We trust that it will set an example for future agreements related to astronomy, subscribed by the country in the next years.

In this context, I would like to express that the Government welcomes the establishment of the "Foundation for the Advancement of Astronomy". This initiative was started by Chilean astronomers who have obtained awards in sciences, and it is supported by the Director General of ESO, Prof. Riccardo Giacconi. We believe that this foundation, complemented by the action of other organisations that bring Chile and ESO together, will play an important role in administering resources for the advancement of astronomy in Chile and will promote international co-operation in this field.

Mr. President, Your Majesties, we are gathered in this impressive scenery to take part in a ceremony which has resulted from the strong and visionary co-operation between the Government of President Frei and ESO. We also take this opportunity to thank the many scientists who have participated in this project with all their effort, the workers who have accomplished it and also the Chilean Congress, represented here by Senators of the Region, for the continuous support. We hope that the Cerro Paranal Observation Centre may soon become operational and that the work carried out on these premises, both by Chilean and foreign guests, may redound to a greater knowledge of the Universe, as well as to clearer benefits for ESO, for its Member States, one of which is the Kingdom of Sweden, and for Chile. In this spirit I would like to express my best wishes for the success of this new adventure in science.

Thank you very much.

### Translation of Speech by H.E. President Eduardo Frei

Your Majesties, Excellencies, Ambassadors, authorities, and a very special greeting to the President of the ESO Council, Dr. Peter Creola, and the Director General, Prof. Giacconi, esteemed friend.

As I contemplate this enterprise, in the middle of the desert, made possible through the joint effort of a group of European countries, their scientific communities and astronomers, on one hand, and of the Chilean nation, its workers, engineers and scientists, on the other, I feel not only deeply gratified but, also, extremely proud.

This is a concrete signal of how our country is becoming increasingly inserted in the international community. And not only in economic terms.

It is certainly true that our country is, nowadays, closely linked to international trade. This year we have completed our association with the MERCOSUR, we have achieved strong ties with the European Union and, for the first time in history, we have signed a Free Trade Agreement with an industrialised country: Canada.

But there are other aspects as well, where we are becoming positively integrated to the rest of the world. Today, our political relations with the community of nations are at a very high level, which would have seemed unfeasible a few years ago. Democracy has brought us closer to the rest of the world and has restored the prestige historically enjoyed by the nation.

In the field of scientific co-operation we have also made progress. The establishment of this observatory is a good example of it. Astronomers from Europe and other countries will come and work here, and the most prominent Chilean astronomers will be given the opportunity of carrying out their research projects.

This opens multiple opportunities for collaboration and creates an extremely valuable platform for training young Chilean astronomers. Our main universities will benefit, as well as the country as a whole, since we will become the seat of one of the most advanced astronomical observatories in the world.

I believe that all these joint activities with industrially and scientifically advanced countries are vitally important, since our own challenge, as far as modernisation is concerned, is the challenge of upgrading our own capabilities in the fields of science and technology.

Chile would not be able to project itself creatively towards the future, nor to create a modern society, if economic growth and the generation of opportunities for people are not simultaneously coupled with the application of frontier technologies in production, in industry, in agriculture, in services and State management.

Perhaps this is one of the greatest challenges we face. The successful achievement of this goal calls for the joint effort of universities, enterprises and the Government. We are working every day towards this end, through the modernisation of education, which is the very basis of the building we must construct. Without education, there would be no future, nor democracy, nor growth, nor competitiveness and we would be unable to create a fairer and more equitable society.

Finally, I would like to take this occasion to publicly express our appreciation to the ESO Member States, to the Organisation itself, its executives and to all those in Chile who have contributed in this task and to say that when I took office there were not only stones, but rocks on the path, but there was also the political will to overcome them, since we could not allow hindrances in the construction of this great enterprise.

At the same time, I would like to avail myself of the presence of Their Majesties, the King and Queen of Sweden, to express our gratitude to them. And also, to tell them that our academic community is deeply indebted to their country, for the support provided to hundreds of Chilean researchers and professors, during their years of exile in Sweden, as well as for the support given to a great number of national institutions that have sustained and developed in Chile, thanks to international collaboration, which was particularly generous and active, in the case of Sweden.

Finally, a special remembrance to the fact that in 1969 my father, President Eduardo Frei Montalva, inaugurated the La Silla Observatory, in the presence of a distinguished personality, former Prime Minister Olaf Palme. The world is small and history is repeating itself. Today, with great joy we are saying "go ahead" to this great enterprise which points to the future and will foster development in our country.

Thank you very much.