# In Memoriam Bengt Westerlund

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Photo: E. Maurice, ESO Historical Picture Archive

Bengt Westerlund, pictured second from left, at a *despedida* (farewell party) at the Pelícano Camp in May 1970.

Bengt Westerlund, who died on 4 June, 2008 began his astronomical career in Sweden where he was born in 1921. He received his PhD in astronomy from the University of Uppsala in 1954 and spent most of the subsequent years, until 1967, at Mt. Stromlo Observatory, Australia, where he was first the Uppsala Schmidt Observer and an Honorary Fellow at the Australian National University (ANU), then becoming in 1958 Reader in Astronomy at the ANU. In 1967 he took a position as Professor of Astronomy at Steward Observatory where Bart J. Bok had become director. In 1969 he was appointed Director of ESO in Chile, which position he held until 1975 when he returned to Sweden to take up the position of the Professor of Astronomy at Uppsala Observatory, retiring in 1987.

His career was devoted to observational astronomy and his work on the structure of the Milky Way and the Magellanic Clouds earned respect and appreciation amongst his colleagues. Within those broad categories he contributed significantly to studies of clusters, stellar populations, carbon stars, planetary nebulae, WR stars, diffuse interstellar bands, luminous stars, stellar classification, and supernova remnants. Beyond these he also published papers on dwarf spheroidals, emission-line galaxies and radio galaxies. In this work, at Mt. Stromlo, Steward Observatory and at ESO in Chile, he was always successful in engaging the interest and participation of students, a number of whom produced high-quality theses under his supervision. Also Bengt was always a keen organiser and participant in international meetings.

The years in Chile were not always easy because of the political turmoil culminating in the violent military coup in 1973. Bengt Westerlund handled these matters in his usual quiet diplomatic manner, so that the life and functioning of ESO Chile was scarcely affected by the surrounding events. The growth of ESO Chile during his time also created additional managerial responsibilities which Bengt handled in his customary calm manner. After his departure from ESO he served for eight years on the OPC, four years of which were as chairman of that important committee.

In whatever ambience Bengt Westerlund worked, he was known for his unfailing courtesy, gentleness, consideration and generosity. People at all levels in ESO and elsewhere remember and still appreciate these characteristics. He was not only sociable but above all a gentleman's gentleman. Bengt Westerlund is survived by his wife Vivi, a constant companion, and his two children Carl Gunnar and Gunilla Margareta.

# Do you know your Solar System? Children in Garching do!

Florian Kerber, Reinhard Hanuschik, Harald Kuntschner
ESO

Complaints about real and perceived shortcomings of the educational system are commonplace. There is also no shortage of well-intentioned suggestions and ideas from all parties involved. But what about some hands-on action? What do you do if you want to try out something new now? The Grundschule Ost (East Junior School) in Garching felt they wanted to dip their toes into astronomy for their project days this year. They decided to contact an expert resource nearby and do this jointly with ESO. Or as the school's choir put it:

*"Wie kann man über den Weltraum was lernen?*
*Danke, danke, das sagen wir heut'!*
*Zum Glück gibt's die ESO und die hilft uns dabei gerne!*
*Danke, danke, das sagen wir heut'!"*

"How can we learn more about space?
Thanks, thanks we're saying today.
Fortunately ESO's ready to help.
Thanks, thanks we're saying today."

This process was simplified by the fact that there is an overlap between ESO staff and the school's parents and parents council, but this is by no means essential. It is essential though to set a clear and agreed goal for the project. The ESO team was formed by the ESO scientists Reinhard Hanuschik, Florian Kerber and Harald Kuntschner. Katjuscha Lockhart from ESO Human Resources coordinated all activities with the school. We took the children on a tour of the Solar System with a series of talks – one for each grade – and then let the school take over to build a scale model of the Solar System's planets for the school yard.

Photo: E. Janssen, ESO

**Figure 1.** Presentation by Florian Kerber from ESO to schoolchildren at the Grundschule Ost in Garching.

The four presentations (see Figure 1) given by us featured a trip with a 'pedestrian rocket' indicating that an effort of mind is needed to make this phantasy journey covering the sun and planets, including an express return to Earth using a comet. We set out to convey some of the fundamental concepts: where do light and warmth come from; why do we have day, night and year; why are some planets rocky and some gaseous; but tried to stay clear of too many numbers. Some numbers though can be brought to life in an intriguing way. The distance between Sun and Earth is often made more tangible by giving the light travel time of 8.3 min. We learned that kids were a lot more excited about another comparison: a racing car at 300 km/h will take about 57 years (neglecting pit stops) to travel the distance, which means that its young driver will have reached grandparents age when he or she arrives. Some children were quick to point out that this doesn't work anyway because the sun is too hot. The talks contained plenty of nice pictures and a few animations but didn't try to compete with video games. It turns out it is still quite easy to focus children's attention for a full 60 minutes if you make sure to get them involved by asking plenty of questions – they'll respond with more and more – and repeating one or two key messages as a chorus: such as "What's the big difference between the sun and the planets? The Sun makes light of its own, the planets don't." About 75 pupils (three classes per grade) attended each talk in the school atrium. The presentations were meant to capture the children's attention and focus their enthusiasm towards the goal of learning more, and of jointly building the scale models of the planets.

Various activities in the classroom followed and then, under the able guidance of the handicraft teacher, the miniature Solar System became a reality. Two different scales were used – one for the distances from the sun and the other for the physical size of the planets. Here ESO scientists only provided the necessary factual information, but the actual implementation was fully in the hands of the school and they did a marvelous job. Everything came to fruition on 24 July when the Planetenweg was inaugurated in the school yard. Planet by planet it grew outward accompanied by songs and a verbal fact sheet presented by the children for each planet. A good crowd of parents, siblings and grandparents attended the event and the local media was present as well. A colour picture of two small children carrying Saturn to its slot graced the title page of the local section of the *Süddeutsche Zeitung*, the renowned south German newspaper. Another picture, this time documenting two of the authors carrying Jupiter (see the Astronomical News section page, lower image), highlighted the local *Garchinger Stadtanzeiger* (Garching town gazette).

The ESO 'godfathers' were honoured during the ceremony with a certificate, but the greatest reward clearly was to witness the enthusiasm of the children and the insight they have gained. It was very impressive to see what can be achieved when effort and creativity from various sources come together. It was gratifying that the pupils acted as teachers themselves when they presented the Solar System to kindergarden pupils the next day.

Still concerned about the school system and the education of our children? If you want to try something different in school next year why not contact your expert resource near-by.


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