

# Joint initiative launches bright new star in Garching

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Sehr geehrter Herr Doktor Tschira, Frau Erste Bürgermeisterin Gabor, Frau Spiegel, Herr Mueller, Herr Bernhardt, Kolleginnen und Kollegen, es freut mich sehr, Sie zu dieser besonderen Feier begrüßen zu dürfen. Wie sie hören, ist mein Deutsch nicht sehr gut, und ich spreche daher auf Englisch weiter.

It is a great pleasure to welcome you to the Headquarters of the European Organization for Astronomical Research in the Southern Hemisphere. ESO is an intergovernmental organization which constructs and operates state-of-the-art telescopes in the Atacama desert in Northern Chile to enable scientists in its 15 Member States to make astronomical discoveries and so contribute to our understanding of the Universe we live in.

Astronomy asks some of our society's largest philosophical questions: Where do we come from? What is the Universe made of? Are there other planets like the Earth? Do they support life? As a science of extremes — the largest distances, longest periods of time, most massive objects, highest temperatures, most extreme energies — astronomy makes excellent use of new technologies and in turn drives advances in technology. Some of these have found surprising applications in other fields and have become part of our daily lives.

Astronomy enjoys much public interest, and as such it is a perfect vehicle for attracting young minds to science and technology, which is crucial for the long-term survival of our civilization. ESO recognizes this, and has a modest but very active programme of education and outreach.

Almost exactly three years ago, following an initiative by ESO's Director of Administration Patrick Geeraert to start attracting external funding, I sent letters to a dozen very distinguished individuals, asking for advice on how to engage philanthropists in helping ESO realize some of its future initiatives. Strengthening astronomical outreach was amongst these.

Two months later the first and only response arrived, from Doctor Klaus Tschira. He indicated his strong interest in astronomy and his willingness to give advice, pointing out that he was well aware that international organizations do not have infinite funding, contrary to popular belief, but was also aware of all the tricks used by fundraisers. He politely apologized for almost having lost his draft response, retrieving it just in time from his computer. We were clearly very lucky!

This led to a visit by Andreas Kaufer, the Director of ESO's Paranal Observatory, and me to Villa Bosch in Heidelberg on 7 March 2011. We were welcomed warmly, and had an open and constructive discussion about ESO's role in astronomy, its overall programme, and possible new initiatives including a small visitor centre at Paranal. We toured the new Heidelberg Institute for Theoretical Studies, the beautiful Advanced Training Centre of EMBL and the remarkable *Haus der Astronomie* which was then still under construction.

This was followed by a visit of Doctor Tschira to the ESO premises in late May of the same year, accompanied by master architect Manfred Bernhardt. They proposed an astronomy outreach centre right here in Garching which would be at least as ambitious as the *Haus der Astronomie*.

Since then the plans developed further in a very collaborative spirit, and the location was finalized. ESO had acquired a piece of land a few years ago in connection with the plans for an extension of the Headquarters. The wonderful gift of the Klaus Tschira Stiftung will allow the construction of the state-of-the-art full-dome planetarium there, with custom-made shows and space for a large exhibition. This is very much appreciated by the ESO Member States.

It was known in antiquity that sometimes a new star appears in the heavens. In the scientific language of the day, Latin, it was called *stella nova* or simply *nova*. Much later it was realized that some of these are, in fact, very distant and hence very bright explosions of entire stars, and they were given the name *supernova*.

The unique design of the new building resembles that of a close double star transferring mass from one component to the other, which will ultimately lead to the heavier component exploding as a supernova, briefly becoming as bright as the light of all the stars in the Milky Way together, easily visible from the Earth. The expectation is that the new centre will similarly shine like a supernova, generating enthusiasm and passion for astronomy all around.

There is also a more personal reason for why I like the name. In 1993, while I was working at the Leiden University, I had a hand in the creation of the Dutch Research School for Astronomy, which bundled the scientific programs of the university astronomy institutions in the Netherlands, and initiating a significant instrumentation programme focused on ESO. The actual acronym of the School in Dutch is NOVA, which was appropriate as it signified a new star. It is quite exciting for me, twenty years later, to be involved in a *Supernova* for ESO.

The study of the stars has had a central role in human culture since the dawn of man. By encouraging astronomy we encourage humanity to advance on all levels. The *ESO Supernova* will add a fantastic new dimension to our education and outreach activities, in collaboration with neighbouring astronomy institutes. Going by the example of the *Haus der Astronomie*, its light will be seen not only in Garching, or Bavaria, or even Germany but in all the Member States including Brazil and in Chile. The name *Supernova* signifies this. I am tremendously pleased to thank Doctor Tschira and the Board of the *Klaus Tschira Stiftung* for this very generous gift and look forward to the completion of this exciting project.