

ESO Supernova  
Planetarium & Besucherzentrum

supernova.eso.org

# EINE NEUE SUPERNOVA ÜBER BAYERN



Die ESO Supernova wird unterstützt von den Gründungspartnern:

Klaus Tschira Stiftung  
gemeinnützige GmbH



Heidelberger Institut für  
Theoretische Studien



Credit: ESO/Architekten Bernhardt + Partner ([www.bp-da.de](http://www.bp-da.de))

## Press Kit



Credit: ESO/P. Horálek

## A NEW SUPERNOVA OVER MUNICH

The ESO Supernova Planetarium & Visitor Centre is a cutting-edge astronomy centre for the public and an educational facility, located at the site of the ESO Headquarters in Garching bei München. The centre hosts the largest tilted planetarium in Germany, Austria and Switzerland and an interactive exhibition, sharing the fascinating world of astronomy and ESO to inspire coming generations to appreciate and understand the Universe around us. All content is provided in English and German and entrance is free in 2018, but requires prior booking. For more information, please visit: [supernova.eso.org](http://supernova.eso.org)

The ESO Supernova Planetarium & Visitor Centre is a cooperation between the European Southern Observatory (ESO) and the Heidelberg Institute for Theoretical Studies (HITS). The building is a donation from the Klaus Tschira Stiftung (KTS), a German foundation, and ESO runs the facility.

**The Klaus Tschira Stiftung (KTS)** was created in 1995 by the physicist and SAP co-founder Klaus Tschira (1940–2015). It is one of Europe’s largest privately funded non-profit foundations. The Foundation promotes the advancement of the natural sciences, mathematics, and computer science, and strives to raise appreciation for these fields. The Foundation’s commitment begins in kindergarten and continues in schools, universities, and research facilities. The Foundation champions new methods of scientific knowledge transfer, and supports both development and intelligible presentation of research findings.

**The Heidelberg Institute for Theoretical Studies (HITS gGmbH)** was established in 2010 by the physicist and SAP co-founder Klaus Tschira (1940-2015) and the Klaus Tschira Foundation as a private, non-profit research institute. HITS conducts basic research in the natural sciences, mathematics, and computer science, with a focus on the processing, structuring, and analysing large amounts of data. The research fields range from molecular biology to astrophysics. The shareholders of HITS are the HITS Stiftung, which is a subsidiary of the Klaus Tschira Foundation, Heidelberg University and the Karlsruhe Institute of Technology (KIT). HITS also cooperates with other universities and research institutes and with industrial partners. The base funding of HITS is provided by the HITS Stiftung with funds received from the Klaus Tschira Foundation. The primary external funding agencies are the Federal Ministry of Education and Research (BMBWF), the German Research Foundation (DFG), and the European Union.

**The European Southern Observatory (ESO)** is the foremost intergovernmental astronomy organisation in Europe and the world’s most productive ground-based astronomical observatory by far. It has 15 Member States: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Italy, the Netherlands, Poland, Portugal, Spain, Sweden, Switzerland and the United Kingdom, along with the host state of Chile. ESO carries out an ambitious programme focused on the design, construction and operation of powerful ground-based observing facilities enabling astronomers to make important scientific discoveries. ESO also plays a leading role in promoting and organising cooperation in astronomical research. ESO operates three unique world-class observing sites in Chile: La Silla, Paranal and Chajnantor. At Paranal, ESO operates the Very Large Telescope, the world’s most advanced visible-light astronomical observatory and two survey telescopes. VISTA works in the infrared and is the world’s largest survey telescope and the VLT Survey Telescope is the largest telescope designed to exclusively survey the skies in visible light. ESO is a major partner in ALMA, the largest astronomical project in existence. And on Cerro Armazones, close to Paranal, ESO is building the 39-metre Extremely Large Telescope, the ELT, which will become “the world’s biggest eye on the sky”.

ESO Supernova is proudly supported by:

- Galaxy partner: LOR Foundation
- Constellation partner: Evans & Sutherland
- Planet partner: Energie-Wende-Garching
- Education partners: Haus der Astronomie
- Technology partners: Centro Multimeios de Espinho, Softmachine Immersive Productions GmbH
- Media partner: HARVARD Engage! Communications



ESO/P. Horálek

## LARGEST TILTED PLANETARIUM IN GERMANY, AUSTRIA AND SWITZERLAND

The heart of the ESO Supernova is a digital planetarium which offers a unique experience through the use of state-of-the-art visualisation techniques.

It will be the largest tilted planetarium dome in Germany, Austria and Switzerland. The shows are displayed on a 360-degree dome, 14 metres in diameter. The clear, digital projection and three-dimensional astronomical database ensure a unique and immersive experience.

The dome can seat up to 109 visitors, has an inclination of 25 degrees, and gives you the experience of not only watching a show, but also of being in the middle of the action in the Universe. This, combined with the most up-to-date programmes for our planetarium shows, will create a stunning experience that will completely immerse you in space! As with the exhibition, all planetarium shows are free of charge in 2018!



Credit: ESO

## INNOVATIVE AND AUTHENTIC SCIENCE VISUALISATIONS

The ESO Supernova hosts an outstanding, modern and interactive astronomical exhibition, which is as entertaining as it is educational. All information in the exhibition is available in English and German. The first permanent exhibition is called The Living Universe, and covers the topic of life in the Universe in the broadest sense. It connects visitors with topics that can seem very distant and abstract by focusing on the human–Universe connection, general astronomy, life in the Universe, and how we observe the Universe using ESO facilities. It is developed by Design und Mehr in collaboration with HITS gGmbH and ESO.

Investigate all 13 different themes of the 2200 m<sup>2</sup> exhibition or select your own highlights. Choose the depth of knowledge you would like for every single theme, giving you complete control over how deeply you would like to delve into the fascinating science of astronomy.

The exhibition includes a small 3D cinema where you can enjoy 3D and 2D movies in English and German. The exhibition is free of charge!



Credit: ESO

## UNFORGETTABLE LEARNING EXPERIENCES FOR SCHOOLS

The ESO Supernova provides unforgettable learning experiences for students of all ages. Professional educators use astronomy to inspire and awaken the interest of young people in science and technology, through interactive activities and experiences that will leave a long-lasting impression. Classes come to the ESO Supernova to discover the wonders of the Universe and to spend time investigating real astronomical problems.

An ESO Supernova education experience includes interactive [planetarium shows](#), [workshops](#) and [tours](#), as well as access to our engaging [exhibition](#). Experiences are adapted to the age of visiting school groups — we welcome students aged 4-18.

The planetarium shows, workshops and exhibition are linked by an overarching didactic strategy that connects students not only to astronomy and physics, but also to maths, chemistry, geography and informatics.

In addition to its regular programme, the ESO Supernova organises [public talks](#) by astronomers from ESO and other research institutes in and around Munich.

All our educational experiences are free.



Credit: ESO

## CURRICULUM-BASED EDUCATIONAL WORKSHOPS FOR TEACHERS

The ESO Supernova can help teachers with unforgettable learning experiences. We provide teachers with information, handouts and materials to aid their teaching, and workshops at the ESO Supernova, all following the curriculum for mathematics and physics in Bavaria, Germany.

During the workshops, our educators show teachers how exciting school subjects can be when they are taught in an astronomical context. Daily phenomena (the seasons, day and night, phases of the Moon, etc) and amazing objects like black holes and supernovae, can not only be linked to the classroom material, but also be used as a context to connect school subjects like maths, physics, biology, chemistry and social studies in an interdisciplinary way.



Credit: ESO/M. Claro

## THE FIRST OPEN-SOURCE PLANETARIUM IN THE WORLD

The full range of free material for planetariums is available on the ESO Supernova website.

- Almost 500 full-dome clips in ESO's and ESA/Hubble's archives.
- Over 250 stunning 360-degree equirectangular panoramas, many of which are full 360 x 180 degree panoramas. These can also be used with Virtual Reality (VR) glasses. VR videos are also offered.
- More than 15 free full-length planetarium shows
- A music archive with over 400 free music tracks composed by ESO Music Ambassadors.
- Our talented artists have produced beautiful image compositions for museums, images and videos for exhibition use in spectacular high resolution — up to 20 000 pixels.
- Full-dome clips for Video Jockey-ing (VJ) use.
- 3D models of everything from ESO telescopes to orbits within the Milky Way.
- Planetarium research papers for the planetarium community which can be freely downloaded.



Credit: M.McCaughrean (ESA)/ESO

## EVENTS@ESOSUPERNOVA

Special events are a large part of what the ESO Supernova is all about: engaging, exciting, educating — and exploring the Universe. Join us as Event Partner and we can host your perfect event.

The building contains a large exhibition area, which spirals gently up and down through the whole building, and a spacious area known as the Void that is beautifully illuminated by natural light during the day and lit at night to reproduce the southern sky. There are also two seminar rooms, a rooftop terrace, a foyer and a digital planetarium. The ESO Supernova offers a generous space for private events, large or small, with space for up to 600 guests. Depending on your needs, you can use the planetarium as a unique venue for your event, the Void for press conferences held in a modern environment, the exhibition area for an exciting and innovative event, or the seminar rooms for a more classic approach.

## BIOS



### Fabian Reckmann

Fabian Reckmann is a civil engineer from Munich. Whilst working in an engineering office he was engaged with many building projects in the logistics sector, school-buildings for a private school (BIS), office buildings and housing constructions. He has been at ESO for 5 years, and is responsible for reconstruction, retrofitting and maintenance of the existing facilities as well as for the projects like the new office building and the ESO Supernova.



### Tania Johnston

Tania Johnston is a science communication specialist with over 12 years of experience, and was responsible for managing the Royal Observatory Edinburgh Visitor Centre for 9 years prior to joining the team at the European Southern Observatory. Tania has created and delivered hands-on workshops and talks on a variety of scientific topics, to a wide range of audiences. She has developed curriculum related educational material and worked closely with the Physics teaching community in Scotland to support the use of astronomy as a context for teaching science at primary and secondary school level.



### Lars Lindberg Christensen

Lars Lindberg Christensen is a science communication specialist, who is Head of the ESO education and Public Outreach Department (ePOD) in Munich, Germany. He leads public outreach and education for the La Silla Paranal Observatory, for ESO's part of ALMA and APEX, for the Extremely Large Telescope, for ESA's part of the Hubble Space Telescope and for the IAU Press Office.

# ONLINE RESOURCES

ESO Supernova website: <http://supernova.eso.org/>

ESO Supernova on social media:

<https://www.facebook.com/ESOSupernova/>

<https://www.facebook.com/ESOSupernovaDE>

<https://twitter.com/ESOSupernova>

<https://twitter.com/ESOSupernovaDE>

Building: <http://supernova.eso.org/about/architecture/>

Planetarium: <http://supernova.eso.org/about/planetarium/>

Exhibition: <http://supernova.eso.org/about/exhibition/>

Education: <http://supernova.eso.org/education/> Guided tours:

<http://supernova.eso.org/about/guided-tours/> Programme:

<http://supernova.eso.org/programme/>

Planning your visit: <http://supernova.eso.org/visit/>

Events@ESOSupernova: <http://supernova.eso.org/your-event/>

Support Us: <http://supernova.eso.org/support-us/>

Volunteers: <http://supernova.eso.org/join-us/>

Selected images:

[http://eso.org/public/images/upr\\_kh9a1127-cc/](http://eso.org/public/images/upr_kh9a1127-cc/)

[http://eso.org/public/images/upr\\_KH9A1165-CC/](http://eso.org/public/images/upr_KH9A1165-CC/)

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[http://www.eso.org/public/images/upr\\_img\\_1487-cc/](http://www.eso.org/public/images/upr_img_1487-cc/)

<http://www.eso.org/public/images/ann15011b/>

<http://www.eso.org/public/images/160808043-cc/>

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<http://www.eso.org/public/images/ann15011d/>

[http://www.eso.org/public/images/esn\\_section\\_captions/](http://www.eso.org/public/images/esn_section_captions/)

<http://www.eso.org/public/images/esn150224-level-0/>

<http://www.eso.org/public/images/esn150224-level-1/>

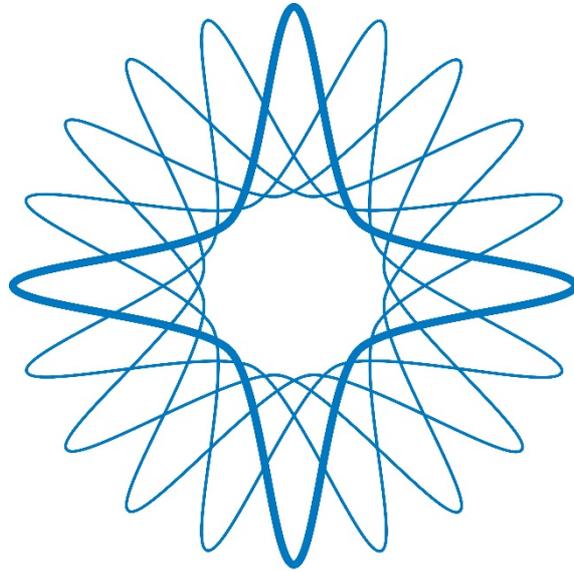
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<http://www.eso.org/public/images/esn150224-level-3/>

<http://www.eso.org/public/images/esn150224-level-4/>

<http://www.eso.org/public/images/esn150224-section/>

<http://www.eso.org/public/images/esn150224-model/>



## **ESO** Supernova

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### Planetarium & Visitor Centre

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