

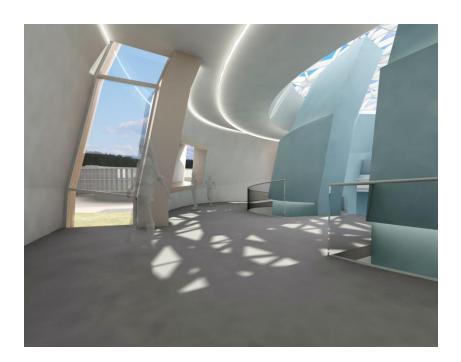
European Organisation for Astronomical Research in the Southern Hemisphere Organisation Européenne pour des Recherches Astronomiques dans l'Hémisphère Austral Europäische Organisation für astronomische Forschung in der südlichen Hemisphäre



ESO Supernova — Planetarium & Visitor Centre

### General facts

- The ESO Supernova Planetarium & Visitor Centre will be located at the ESO
  Headquarters in the Garching bei München research centre, some 15 kilometres north of
  Munich, Germany.
- The facility will be bilingual English/German in all aspects from reception to planetarium shows and information materials.
- The new building for the popularisation of astronomy is funded through a donation from the Klaus Tschira Stiftung, a German foundation that supports the natural sciences, mathematics and computer science. The idea for the facility originated out of cooperation between ESO and the Heidelberg Institute for Theoretical Studies — the research institute of the Klaus Tschira Stiftung.
- The new centre will be supported by operational funding from ESO and is designed to inspire people to look up at the stars, and teach people about the importance of astronomy and its effects on our day-to-day lives.
- The construction work is scheduled to begin end of 2014.
- The opening hours are planned to be 10.00 to 20:00/21:00 on work days and at least one weekend day.



# **Objectives**

- Attract the younger generation to science and technology.
- Share the fascinating world of astronomy with the various target groups from laypeople to decision-makers.

- Open the eyes of the visitor to the Universe and show our small planet within the bigger context of the Universe.
- Offer a place for "astro-tourists" to discover our amazing Universe: explore amazing sights, places and facilities that explore our Universe. Walk through some of the most beautiful vistas in the Universe.
- Use the cross-over between culture and astronomy to raise awareness of astronomy to science-inattentive audiences
- Bring European astronomy and ESO closer to the heart of Europeans by offering them the opportunity to access, understand and experience what role they play
- Stress the importance of having organisations such as ESO and the Max-Planck institutes, by offering the local community and authorities the chance to appreciate their leading roles
- Raise awareness of the scientific and technological breakthroughs done in Europe and at ESO
- Create a once-in-a-lifetime experience for visitors who will feel the Universe, be amazed by the European facilities, understand their activities and grasp the importance of its results through an engaging, interactive, augmented and virtually enhanced exhibition.
- Provide personal face-to-face contact with scientists to inspire young people

### Building

- The new building's unique design will resemble the form of a binary star system, as it transfers mass from one component to the other, prior to going supernova.
- The design of this stunning, sleek building has been conceived by Klaus Tschira with the help of the Darmstadt-based architectural firm, Bernhardt + Partner.
- The new centre will be a "sister" to the spectacular <u>Haus der Astronomie</u>, a centre for astronomy education and outreach in Heidelberg, Germany, founded in late 2008 by the <u>Max Planck Society</u> for the Advancement of Science and the Klaus Tschira Stiftung and also designed by Bernhardt + Partner.
- The new building will be integrated with the existing facilities, making use of current roads and entry points enabling easy access for both visitors and staff.
- The building consists of a basement, ground floor and three upper levels.
  - The exhibition area which will be 2189 m<sup>2</sup> stretches from ground floor to the 2nd floor and serves as area for the permanent exhibitions.
  - On the ground floor there is a state-of-the-art fulldome planetarium
  - The 3rd floor holds a seminar area.
  - In the basement functions such as bathroom facilities, cloak rooms are housed and a snack area are located. In addition offices for the centre staff with natural light are provided in the basement.
- A service road for maintenance and emergency services access is incorporated into the design of the new complex, with additional parking spaces for staff and visitors being planned.



## Usage of each floor

- 1 Foyer on the ground floor
  - The foyer area on the ground floor serves as the reception for all visitors to the facility.
  - Those wishing to visit other buildings on the ESO site, can book a guided tour in the reception.
  - Adjacent to the reception will be a shop, where merchandise can be purchased.
- 2 Planetarium and auditorium on the ground floor
  - The state-of-the-art fulldome planetarium will hold 110-115 visitors in a 14-metre dome with unidirectional seating, with an inclination between 20-25 degrees.
  - ESO plans to display between 3-7 planetarium shows per day.
  - This would be one of only about 10 digital fulldome planetariums in Germany.
- 3 Exhibition space from the ground floor to the second floor.
  - The exhibition area will be more than 2000 m<sup>2</sup> spread from the ground floor to the 2nd floor.
  - Visitors can either experience the exhibition before or after the planetarium show, or decide to skip either the planetarium or the exhibition.
  - The typical visitor will see the exhibition first, and then enter the planetarium. The exhibition will take its **beginning** at the bottom of the building, culminate in a **highlight** at the top, and then have a **finale** once the bottom is reached again.
  - The duration of a visit must be flexible from a quick superficial 30-minute walk-through, to a 4-hour in-depth study of all exhibits

#### 4 Seminar room on the 3rd floor

- The seminar room has a floor space of 156 m<sup>2</sup> and can seat 120 people for lectures, 90 people for workshops and up to 65 people for interactive training sessions.
- Refreshments can be provided to seminar participants via a kitchenette on the 3rd floor.
- A roof terrace is provided for those wishing to take a break from seminars, who may want to enjoy the views of the site.

#### 5 Basement

- In the basement the visitors find Restrooms, and Cloakrooms, which has been designed with classroom visits in mind.
- A snack area functions as lunch and resting area for visitors and school classes. Large tables and chairs are available as well as self-service, vending machines with sandwiches, drinks etc.
- This area provides the important physical boost mid-way into the visit, especially for families. It makes the whole experience more pleasant and offers a moment to include in the experience and get ready for more.
- The snack area is preceded by an outdoor terrace that can be used in appropriate weather conditions.
- The basement will also contain a planetarium workshop area, storage facilities, 10 temporary and permanent working places for centre staff, kitchenette, bathrooms for staff and an audiovisual studio.

## The visitor experience in the Centre

- Visitors will get to experience astronomy and (ESO) astronomical facilities, almost as being there themselves.
- The visitor experience will be strongly inspirational and aesthetical from beginning to finish in terms of the sensory experiences: music, acoustics, light, touch, visual impression.
- In order to maintain the world-class feel of ESO, the exhibition and planetarium have to
  offer a once-in-a-lifetime-experience by using the most advanced exhibition and
  visualization techniques available, and by keeping the visitor engaged throughout the entire
  visit.
- The concept of the exhibition and planetarium will involve an intense visiting experience that will leave the visitor in awe at the Universe we live in, and with a clear view and understanding of ESO's and its partner's roles and activities.