

supernova.eso.org



**ESO** Supernova  
Planetarium & Visitor Centre



Quarterly Programme | 2019

# January–March



Klaus Tschira Stiftung  
gemeinnützige GmbH



Heidelberg Institute for  
Theoretical Studies



# The ESO Supernova is proudly supported by

## Founding Partners



Klaus Tschira Stiftung  
gemeinnützige GmbH



Heidelberg Institute for  
Theoretical Studies



## Galaxy Partner



## Constellation Partners



EVANS & SUTHERLAND



## Star Partners

We're waiting for you!

## Planet Partner



## Media Partner



## Technology Partners



## Educational Partner



## About the logo

The multiple overlapping stars in our logo symbolise both the energy of a supernova and the vibrant energy of the educational facility. Associations with a spirograph or the repetitive swinging of a pendulum are welcome. The underlying fundamental geometry in the logo comes from the stars used in the ESO logo.



ESO Supernova  
Planetarium & Visitor Centre

## Front cover

An image of the Christmas Tree Cluster and the Cone Nebula fills the ESO Supernova planetarium dome.  
Credit: ESO/P. Horálek

## Welcome to the ESO Supernova!

Welcome to 2019! We hope you had a sparkling start to the year! If you're looking for more ways to spend starry days or evenings, this quarterly programme is full of exciting suggestions.

Take the exclusive planetarium show *Aurora: Lights of Wonder* as an example. This captivating fulldome experience is brought to you by South Korean director Kwon O Chul who delves into both the scientific and the mythological significance of aurorae, while you marvel at this spectacular show of lights. The planetarium show will run for one month only in the ESO Supernova so be quick to book your tickets! There are plenty of other activities for you to choose from and you can find out all about them in the following pages.



Tania Johnston

2019 brings a significant change to our operations, as we introduce paid tickets to the ESO Supernova. Admission to explore the exhibition on your own remains free of charge and requires no prior booking. However, if you wish to watch a planetarium show, have a guided tour or participate in a Friday evening event, you will need to purchase tickets online. The ticket for a planetarium show costs €5/person, and the ticket for a guided tour costs €8/person. For public evening events, please consult our programme, as prices vary. Prices are the same for all visitors. Unfortunately we do not offer refunds.

Organised school groups will continue to enjoy our education programme free of charge. Teachers should read the following page for additional information on how to organise a school visit: <https://supernova.eso.org/education/> and should fill out the form on that page to make a request. For additional information, teachers can contact us at the email address [education@eso.org](mailto:education@eso.org).

Companies wishing to rent space inside the ESO Supernova, for example to use our seminar rooms for a conference, should read the following page: <https://supernova.eso.org/your-event/> and should fill out the form on that page to make a request. For additional information, companies can contact us at the email address [events@eso.org](mailto:events@eso.org).

We hope you enjoy your visit to the ESO Supernova and come back soon!

Tania Johnston  
ESO Supernova Coordinator

## The ESO Supernova Planetarium & Visitor Centre

The ESO Supernova Planetarium & Visitor Centre is a cutting-edge astronomy centre for the public located on the site of ESO's Headquarters in Garching bei München. It was made possible by 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 and ESO runs the facility.

The ESO Supernova is a non-profit educational facility that receives no state funding other than through ESO's normal operating budget. Entry to the exhibition is free of charge and requires no prior booking. For all other public activities that we offer you need to make a reservation online and purchase a ticket: planetarium shows (€5/person), guided tours (€8/person) or evening public events (price varies). Our education programme for organised school groups will remain free.

The ESO Supernova's vision is to make our community aware and proud of their astronomical achievements. By sharing the fascinating world of astronomy and ESO, we aim to inspire coming generations to appreciate and understand the Universe around us. The ESO Supernova's mission is to engage you — the visitors — as active participants. By designing curriculum-based learning experiences and using Big Data in astronomy to create innovative and authentic visualisations of front-line science, we bring ESO's observing facilities in the Southern Hemisphere closer to you.

The heart of the ESO Supernova is a planetarium with state-of-the-art projection technology, 109 seats, a dome 14 metres in diameter and a scientifically accurate three-dimensional astronomical database, which ensures an authentic and immersive experience. The ESO Supernova also contains a 2200-m<sup>2</sup> interactive astronomical exhibition and guided tours. In addition, school classes can book one of our hands-on workshops.

### ESO Supernova in numbers

13	Themes in the "The Living Universe" exhibition
2200 m <sup>2</sup>	Area of the exhibition space
255 m	Length of the exhibition ramp
109	Seats in the planetarium
14 m	Diameter of the planetarium dome
25°	Inclination of the planetarium dome
15.5 m	Height of the Void
140 m <sup>2</sup>	Area of the Void
2	Seminar rooms
166 m <sup>2</sup>	Total area of the seminar rooms
100 000	Expected number of visitors per year
5	Price of a planetarium show ticket in euros
8	Price of a guided tour ticket in euros

Planetarium Shows

6

Guided Tours

12

Education Programme

16

Other Activities

18

Renting space at the ESO Supernova

20

Exhibitions

22

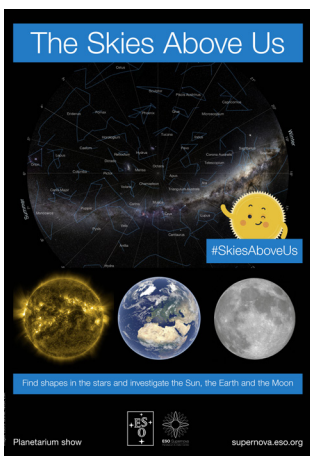
Daily Programme

25

Plan Your Visit

32

### The Skies Above Us



#### Educational show

Designed specifically for our youngest school groups, this educational show investigates the Earth–Moon–Sun system and tells stories of the constellations. This interactive and engaging show is aimed at children aged 4–7.

Duration: 00:45

Languages: EN/DE

Price: €5

### A Tour of the Solar System



#### Educational show

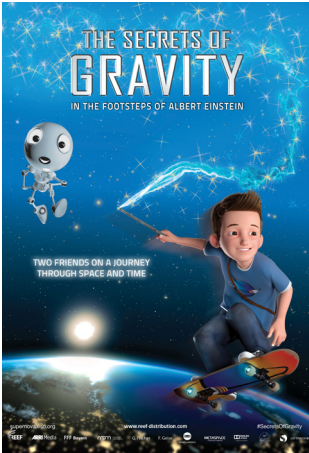
For primary school visitors and young families, this educational planetarium show, ideally suited to children aged 8–11, combines an exploration of the night sky with a factual journey through our Solar System.

Duration: 01:00

Languages: EN/DE

Price: €5

The Secrets of Gravity —  
In the Footsteps of Albert Einstein



Family show

Robot ALBY takes young Luke on a magical journey of discovery through time and space, during which they not only uncover the secrets of gravity, but also learn about friendship and imagination — for both Luke and ALBY have secrets of their own.

Duration: 01:00  
Languages: EN/DE

Price: €5

Europe to the Stars



Family show

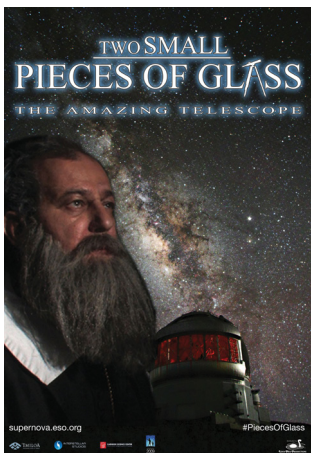
Join an epic journey behind the scenes at the most productive ground-based observatory in the world, revealing the science, history, technology and people of the European Southern Observatory.

Discover ESO's story of cosmic curiosity, courage and perseverance; a story of observing a Universe of deep mysteries and hidden secrets; and a story of designing, building and operating the most powerful ground-based telescopes on the planet.

Duration: 00:50  
Languages: EN/DE

Price: €5

### Two Small Pieces of Glass — The Amazing Telescope



#### Family show

Join two teenagers at a local star party and learn how the telescope has helped us to understand our place in space and how it continues to expand our knowledge of the Universe. From Galileo's modifications to a child's spyglass — using two small pieces of glass — to the launch of the NASA/ESA Hubble Space Telescope, the show will present the past, present and future of astronomy.

Duration: 00:38  
Languages: EN/DE

Price: €5

### The Sun, Our Living Star



#### Family show

Discover the secrets of our star and experience never-before-seen images of the Sun's turbulent surface in immersive full-dome format. The Sun has shone on our world for four and a half billion years. It is our nearest star and our planet's powerhouse, the source of the energy that drives our winds, our weather and all life.

Duration: 00:40  
Languages: EN/DE

Price: €5



The Planets – Expedition into the Solar System



Family show

In recent years, space probes have been sent to explore the planets of our Solar System like Mars and Jupiter. In *The Planets – Expedition into the Solar System* you will be taken on a trip to discover our cosmic neighbours through the eyes of these space voyagers. The wonders of the Solar System await you.

Duration: 00:48  
Languages: EN/DE

Price: €5

Your selfie corner at the

**ESO** Supernova  
Planetarium & Visitor Centre

Special Screening: Aurora: Lights of Wonder



Family show

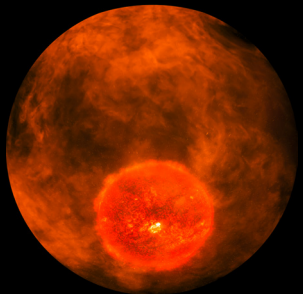
This captivating full-dome experience allows audiences to experience immersive real-time views of aurorae for the first time. Learn what causes the aurorae and their beguiling display of colours, uncover their mythological significance and discover the latest scientific breakthroughs in the fascinating field of auroral studies.

Only on screen in March!

Duration: 00:50  
Languages: EN/DE

Price: €5

Screen shots of the show *Aurora: Lights of Wonder*



# A cutting-edge planetarium & astronomy centre for the public

located in Garching bei München,  
at the Headquarters of the  
European Southern Observatory (ESO)

Support the ESO Supernova.  
Donate at [supernova.eso.org/donate](https://supernova.eso.org/donate)

# Treffpunkt Führungen *Meeting point tours*

Look for the meeting point sign in the entrance area

The ESO Supernova exhibition is designed to be explored on your own, so you can choose the depth of knowledge you want to access and you also have hands-on exhibits to explore. Entry to the exhibition is free of charge and does not require prior booking.

Or you can also join one of our special guided tours for the price of €8/person. We offer two different tours, each available in both German and English. Make your choice, reserve a place and pay online in advance, print a ticket from a ticket kiosk at the ESO Supernova, and join us. All tours start from the Void, next to the entrance area, and last for about 45 minutes.

## Premises Tour



### Standard tour

Take a peek into the heart of the European Southern Observatory by visiting the ESO Headquarters building, and learn more about the history and future of ESO. The building is normally closed to visitors.

Duration: 00:45

Languages: EN/DE

Max. no. participants: 25

Price: €8

## Exhibition Tour



### Standard tour

Join one of our guided tours to be led through the exhibition and have the opportunity to talk to a real astronomer. Your guide will lead you around the highlights of the exhibition and answer any questions you may have about astronomy.

Duration: 00:45

Languages: EN/DE

Max. no. participants: 25

Price: €8

For practical reasons the guided tours are limited to 25 people. Please ensure that you book your tickets online in advance. See our daily programme online on [supernova.eso.org](http://supernova.eso.org) or on the infoscreens at the ESO Supernova for the starting times of the tours.

[www.bernhardt-partner.de](http://www.bernhardt-partner.de)

# ESO Supernova

---

## Planetarium & Visitor Centre

The ESO Supernova was designed by the architects Bernhardt + Partner. Their office was established in 1994 and is located in Darmstadt, Germany. The team's ability to design eye-catching, memorable science buildings is evident in their past projects, such as the Haus der Astronomie and the EMBL International Centre for Advanced Training (both in Heidelberg).





A view inside the planetarium at the  
ESO Supernova Planetarium & Visitor Centre





The ESO Supernova provides unforgettable learning experiences for students of all ages. Professional educators use astronomy to inspire young people and awaken their interest in science and technology, through interactive activities and experiences that will leave a 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 educational 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. In addition to our range of family-friendly planetarium shows, we have two specially developed educational shows with strong curriculum links.

We have created six different hands-on workshops tailored to different stages in the school curriculum, from kindergarten to grade 13. Each workshop is linked to the Bavarian curriculum and gives students a fun and interactive experience of what it's like to be an astronomer investigating a real scientific problem. These workshops also demonstrate to teachers how an astronomical context can be used to teach a wide range of curriculum subjects, linking them together in an interdisciplinary way.

A full educational visit lasts between three and four hours. These packages are available in German as well as English. School groups must make advance reservations for workshops, guided tours and planetarium shows. All our educational experiences are **free**.

For teachers, the ESO Supernova offers special teacher training sessions and we coordinate a network of teachers in Bavaria, Germany and Europe.

Please visit our website for additional information!





ESO/P. Horálek



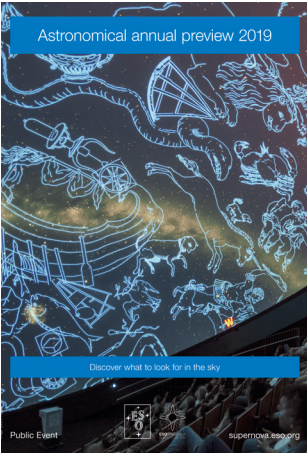
Teacher workshops, events and activities

ESO/M. Zamani



Astronomical annual preview 2019

19:00



Planetarium show

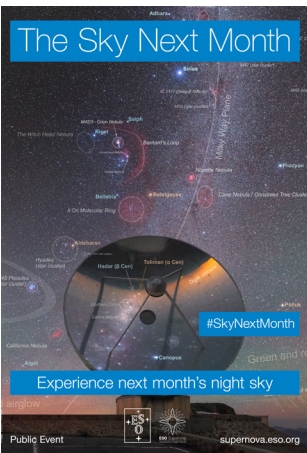
Join us for this special planetarium show, as we take a look forward to the year ahead and the celestial highlights which can be seen in 2019. From meteor showers to planet conjunctions and eclipses, our presenter will guide you through the 2019 celestial events. If you would like to know when you should take your telescope out or simply gaze at the night sky, this is the show to book.

Duration: 01:30  
Language: DE

Date: 12.01.  
Price: €10

The Sky Next Month

19:00



Public talk

A summary of the astronomical highlights to look out for in the coming month's night sky, and a round-up of the latest news.

Duration: 01:00  
Language: DE

Dates: 01.02. | 01.03. | 29.03.  
Price: €10

tonelabs — Fragmented Future

19:00



### Cultural performance

Musicians Ali and Max, alias tonelabs, live in Munich and produce electronic music which is not just a sequence of sounds, but also an attitude to life. Combining animations and videos from around the world, *Fragmented Future* is an electronic concert that invites you to discover new dimensions.

Duration: 01:30  
Language: DE

Date: 15.03.  
Price: €18

**Take a piece  
of the Universe  
with you!**



Visit our ESOshop,  
located in the foyer.

## Renting space at the ESO Supernova

Areas inside the ESO Supernova Planetarium & Visitor Centre can be rented for commercial events, such as conferences, business meetings, corporate parties etc.

The building contains a spacious area known as the Void that is beautifully illuminated by natural light during the day and lit at night to reproduce the constellations of the southern sky.

There are also two seminar rooms that can be combined, with access to a rooftop terrace and a foyer for catering. In addition to renting space, companies can opt to include one of our activities in the programme of their event, such as a planetarium show or a visit to the astronomical exhibition.

We are unfortunately unable to accommodate birthday parties.

Please refer to our Events brochure for more details: <https://supernova.eso.org/your-event/> For an offer, please fill out the form at: <https://supernova.eso.org/your-event/>. That form is only for companies wanting to rent space inside the ESO Supernova.



The planetarium



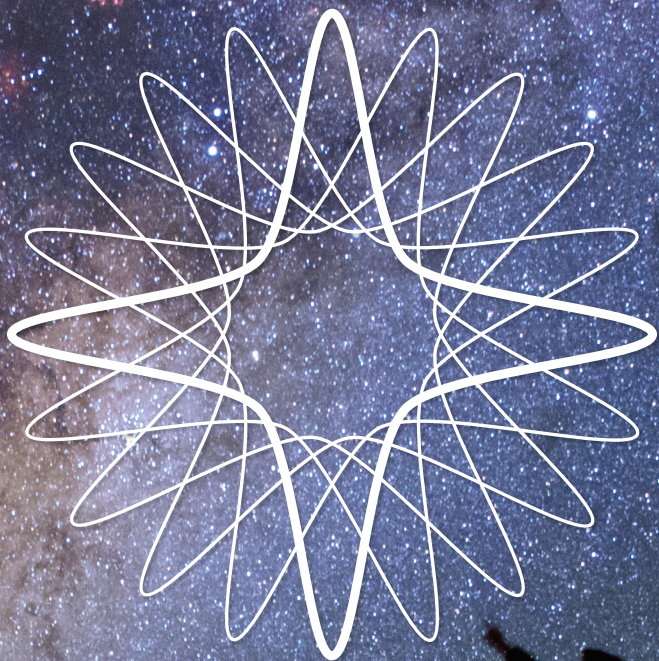
The Void



The exhibition area



The seminar rooms



Experience  
the

Universe!



### The Permanent Exhibition: The Living Universe

The ESO Supernova hosts an outstanding, modern and interactive astronomical exhibition, which is as entertaining as it is educational. Explore, touch and use real astronomical artefacts and conduct experiments to get an idea of what it means to be an astronomer, to work in science, and to discover the mysteries of the Universe.

The exhibition covers the topic of life in the Universe in the broadest sense. It connects you 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.

Investigate all 13 different themes of the exhibition or select your own highlights. Choose the depth of knowledge you would like for each item, giving you complete control over how deeply you would like to delve into the fascinating science of astronomy.

How long you stay is up to you — you can spend just 30 minutes on a quick walkthrough, or up to four hours on an in-depth study of all the exhibits. You can even make several visits, concentrating on a different part of the exhibition each time!

All information in the exhibition is available in English and German.



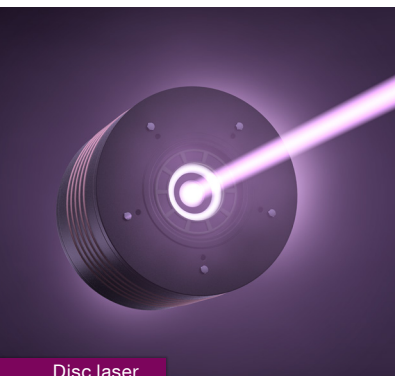
The panels are beautifully designed and very engaging, with explanations suitable for all ages.

Visiting the exhibition on your own does not require prior booking and is free of charge. Come directly to the ESO Supernova reception where you can get your personal free entrance ticket for the exhibition. This ticket includes a unique QR code and an individual URL. Many digital stations in the exhibition are equipped with a QR code reader (a blue box with a red light) which allows you to scan your code — in doing so you create a screenshot of the associated station and store it online. The URL on your ticket contains all the scans you make in the exhibition, creating your own personal take-home exhibition!

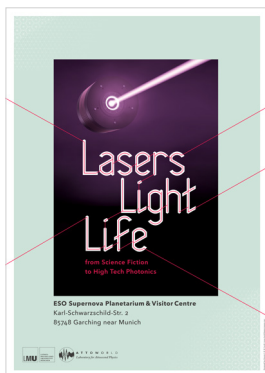
Using your personal smartphone and an app that can read QR codes, you can also scan our panels, each of which has its own code. This way you can re-read the parts you are most interested in again at home, or share the images from the panels with your friends!

If you would like to take part in a guided tour, advance online booking and payment are required. Please see the guided tours section for more details.

Free entry



Disc laser



### Temporary exhibition: Lasers | Light | Life

Light is the engine of life. We are understanding more and more about how to control and use it. Laser technologies are shaping the 21st century and are opening up fascinating technological prospects for us. It all started in 1960, when the laser was invented and a new era of physics began. The laser has long been an indispensable tool in communication, measurement technology, astronomy, medicine, and industry.

From winter 2018, this fascinating epoch will be presented in the exhibition Lasers, Light, Life — From science fiction to high-tech photonics. Designed by the Faculty of Physics of the Ludwig-Maximilians-Universität München (LMU), it provides insights into laser technology from its very beginnings to the present day, and highlights visionary possibilities for its application. In addition to science fiction, the functioning of lasers and their development history, the exhibition presents fascinating areas of basic research at the LMU and the Max Planck Institute of Quantum Optics in Garching.

The possibilities of the laser are far from exhausted. The 21st century is often referred to as the century of the photon — the very particle of light. Follow the path of light through this exhibition!



**ATTO WORLD**  
*Laboratory for Attosecond Physics*

Date: until 26.05.  
Free entry



Daily Programme

The Laser Guide Star

The programme is subject to modifications.  
Please consult the online programme at [supernova.eso.org](http://supernova.eso.org)

January

Sky and Historical Events

03.01.2019 Quadrantids Meteor Shower

06.01.2019 New Moon January

07.01.1610 *Discovery of the Jovian Moons*

15.01.1996 *First Hubble Deep Field survey*

21.01.2019 Total Lunar Eclipse

21.01.2019 Full Moon January

31.01.2019 Venus Occultation by the Moon

09.01.19 WED	10:00	SHOW	The Skies Above Us	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
10.01.19 THU	15:30	SHOW	Europe to the Stars	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
11.01.19 FRI	10:00	SHOW	The Planets — Expedition into the Solar System	DE
	11:30	SHOW	A Tour of the Solar System	DE
	15:00	SHOW	Europe to the Stars	DE
12.01.19 SAT	12:30	SHOW	The Sun, Our Living Star	DE
	14:00	SHOW	A Tour of the Solar System	DE
	15:30	SHOW	Two Small Pieces of Glass	DE
	19:00	EVENT	Astronomische Jahresvorschau 2019	DE
13.01.19 SUN	12:30	SHOW	The Planets — Expedition into the Solar System	DE
	14:00	SHOW	The Secrets of Gravity	DE
	15:30	SHOW	The Sun, Our Living Star	EN
16.01.19 WED	10:00	SHOW	The Skies Above Us	EN
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
	15:30	SHOW	Two Small Pieces of Glass	DE
17.01.19 THU	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	Europe to the Stars	EN
	15:30	SHOW	The Secrets of Gravity	DE
18.01.19 FRI	10:00	SHOW	A Tour of the Solar System	DE
	11:30	SHOW	The Planets — Expedition into the Solar System	DE
19.01.19 SAT	15:00	SHOW	Europe to the Stars	DE
	12:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
	15:30	SHOW	The Planets — Expedition into the Solar System	DE
20.01.19 SUN	12:30	SHOW	Europe to the Stars	DE
	14:00	SHOW	The Secrets of Gravity	DE
	15:30	SHOW	The Planets — Expedition into the Solar System	EN

23.01.19 WED	10:00	SHOW	A Tour of the Solar System	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
24.01.19 THU	15:30	SHOW	Two Small Pieces of Glass	DE
	11:30	SHOW	The Planets — Expedition into the Solar System	DE
	14:00	SHOW	Europe to the Stars	DE
25.01.19 FRI	10:00	SHOW	The Skies Above Us	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
26.01.19 SAT	15:30	SHOW	The Secrets of Gravity	DE
	12:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
27.01.19 SUN	15:30	SHOW	Europe to the Stars	EN
	12:30	SHOW	Two Small Pieces of Glass	DE
	14:00	SHOW	The Secrets of Gravity	DE
30.01.19 WED	15:30	SHOW	The Planets — Expedition into the Solar System	DE
	10:00	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
31.01.19 THU	15:30	SHOW	Two Small Pieces of Glass	DE
	10:00	SHOW	The Skies Above Us	DE
	11:30	SHOW	Europe to the Stars	DE
	14:00	SHOW	A Tour of the Solar System	DE

## February

### Sky and Historical Events

02.02.2019 Saturn Occultation by the Moon

04.02.2019 New Moon February

05.02.1963 *Discovery of quasars*

11.02.2016 *First observation of gravitational waves announced*

18.02.1930 *Discovery of Pluto*

19.02.2019 Full Moon February

26.02.1948 *Foundation of the MPG (Max Planck Society for the Advancement of Science)*

01.02.19 FRI	10:00	SHOW	The Planets — Expedition into the Solar System	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	The Secrets of Gravity	DE
	19:00	EVENT	The Sky next month	DE

## January–March | 2019

02.02.19 SAT	12:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	Two Small Pieces of Glass	DE
	15:30	SHOW	The Sun, Our Living Star	DE
03.02.19 SUN	12:30	SHOW	Europe to the Stars	DE
	14:00	SHOW	The Secrets of Gravity	DE
	15:30	SHOW	The Planets — Expedition into the Solar System	EN
06.02.19 WED	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	Two Small Pieces of Glass	EN
	15:30	SHOW	Europe to the Stars	DE
07.02.19 THU	10:00	SHOW	The Skies Above Us	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
08.02.19 FRI	10:00	SHOW	The Skies Above Us	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
	15:30	SHOW	The Secrets of Gravity	DE
09.02.19 SAT	12:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	The Sun, Our Living Star	EN
10.02.19 SUN	12:30	SHOW	Europe to the Stars	DE
	14:00	SHOW	The Secrets of Gravity	DE
	15:30	SHOW	The Planets — Expedition into the Solar System	DE
	10:00	SHOW	The Skies Above Us	DE
13.02.19 WED	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
	15:30	SHOW	Two Small Pieces of Glass	DE
	10:00	SHOW	Europe to the Stars	EN
14.02.19 THU	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	Europe to the Stars	DE
	10:00	SHOW	A Tour of the Solar System	DE
15.02.19 FRI	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	The Secrets of Gravity	DE
	12:30	SHOW	A Tour of the Solar System	DE
16.02.19 SAT	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	The Sun, Our Living Star	DE
	12:30	SHOW	Europe to the Stars	DE
17.02.19 SUN	14:00	SHOW	The Secrets of Gravity	DE
	15:30	SHOW	The Planets — Expedition into the Solar System	EN
	10:00	SHOW	The Skies Above Us	DE
	11:30	SHOW	A Tour of the Solar System	DE
20.02.19 WED	13:30	SHOW	Europe to the Stars	DE

21.02.19 THU	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
22.02.19 FRI	10:00	SHOW	Two Small Pieces of Glass	DE
	11:30	SHOW	The Planets — Expedition into the Solar System	DE
23.02.19 SAT	14:00	SHOW	Europe to the Stars	DE
	15:30	SHOW	A Tour of the Solar System	DE
	12:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	The Sun, Our Living Star	EN
24.02.19 SUN	12:30	SHOW	Europe to the Stars	DE
	14:00	SHOW	The Secrets of Gravity	DE
	15:30	SHOW	The Planets — Expedition into the Solar System	DE
27.02.19 WED	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	EN
28.02.19 THU	15:30	SHOW	Two Small Pieces of Glass	DE
	10:00	SHOW	The Skies Above Us	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	Europe to the Stars	DE

## March

### Sky and Historical Events

01.03.2019	Saturn Occultation by the Moon
06.03.2019	New Moon March
13.03.1781	Discovery of Uranus
20.03.2019	March Equinox
21.03.2019	Full Moon March
29.03.1807	Discovery of Vesta
29.03.2019	Saturn Occultation by the Moon

01.03.19 FRI	10:00	SHOW	The Sun, Our Living Star	DE
	11:30	SHOW	Europe to the Stars	DE
	14:00	SHOW	A Tour of the Solar System	DE
	15:30	SHOW	The Secrets of Gravity	EN
	19:00	EVENT	The Sky next month	DE
02.03.19 SAT	12:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
03.03.19 SUN	15:30	SHOW	Aurora: Lights of Wonder	EN
	12:30	SHOW	Aurora: Lights of Wonder	DE
	14:00	SHOW	The Secrets of Gravity	DE
	15:30	SHOW	The Sun, Our Living Star	DE

## January–March | 2019

06.03.19 WED	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
	15:30	SHOW	Aurora: Lights of Wonder	DE
07.03.19 THU	10:00	SHOW	The Secrets of Gravity	DE
	11:30	SHOW	The Skies Above Us	DE
	14:00	SHOW	A Tour of the Solar System	EN
	15:30	SHOW	Two Small Pieces of Glass	DE
08.03.19 FRI	10:00	SHOW	Aurora: Lights of Wonder	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
09.03.19 SAT	15:30	SHOW	The Secrets of Gravity	DE
	12:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
10.03.19 SUN	15:30	SHOW	Aurora: Lights of Wonder	EN
	12:30	SHOW	Aurora: Lights of Wonder	DE
	14:00	SHOW	The Secrets of Gravity	DE
13.03.19 WED	15:30	SHOW	Europe to the Stars	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
14.03.19 THU	15:30	SHOW	The Secrets of Gravity	DE
	10:00	SHOW	The Skies Above Us	DE
	11:30	SHOW	A Tour of the Solar System	DE
15.03.19 FRI	10:00	SHOW	Aurora: Lights of Wonder	DE
	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
16.03.19 SAT	15:30	SHOW	Europe to the Stars	DE
	19:00	EVENT	tonelabs   Fragmented Future	DE
	12:30	SHOW	A Tour of the Solar System	DE
17.03.19 SUN	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	Aurora: Lights of Wonder	DE
	12:30	SHOW	Aurora: Lights of Wonder	DE
20.03.19 WED	14:00	SHOW	The Secrets of Gravity	DE
	15:30	SHOW	The Sun, Our Living Star	EN
	10:00	SHOW	The Skies Above Us	DE
21.03.19 THU	11:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Sun, Our Living Star	DE
	15:30	SHOW	Aurora: Lights of Wonder	DE
22.03.19 FRI	10:00	SHOW	A Tour of the Solar System	DE
	11:30	SHOW	The Secrets of Gravity	DE
23.03.19 SAT	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	The Secrets of Gravity	DE
	12:30	SHOW	A Tour of the Solar System	DE
	14:00	SHOW	The Planets — Expedition into the Solar System	DE
	15:30	SHOW	Aurora: Lights of Wonder	DE

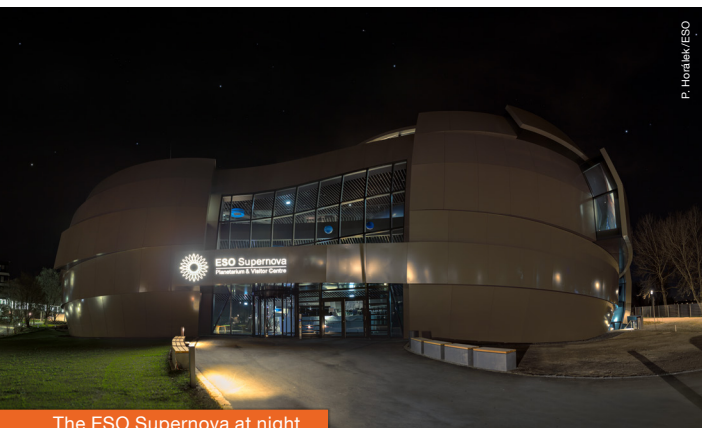
24.03.19	12:30	SHOW	The Sun, Our Living Star	DE	
SUN	14:00	SHOW	The Secrets of Gravity	DE	
	15:30	SHOW	Aurora: Lights of Wonder	EN	
	11:30	SHOW	A Tour of the Solar System	DE	
27.03.19	11:30	SHOW	A Tour of the Solar System	DE	
	15:30	SHOW	Europe to the Stars	EN	
28.03.19	10:00	SHOW	Aurora: Lights of Wonder	DE	
	11:30	SHOW	A Tour of the Solar System	DE	
29.03.19	10:00	SHOW	The Planets — Expedition into the Solar System	DE	
	11:30	SHOW	The Skies Above Us	DE	
	14:00	SHOW	Europe to the Stars	DE	
	15:30	SHOW	The Secrets of Gravity	DE	
	19:00	EVENT	The Sky next month	DE	
	30.03.19	12:30	SHOW	A Tour of the Solar System	DE
		14:00	SHOW	The Sun, Our Living Star	DE
15:30		SHOW	Aurora: Lights of Wonder	DE	
31.03.19	12:30	SHOW	Aurora: Lights of Wonder	DE	
	14:00	SHOW	The Secrets of Gravity	DE	
	15:30	SHOW	The Planets — Expedition into the Solar System	EN	

Klaus Tschira Stiftung  
gemeinnützige GmbH



We support the  
Natural Sciences, Mathematics  
and Computer Science.

[www.klaus-tschira-stiftung.de](http://www.klaus-tschira-stiftung.de)



The ESO Supernova at night

### Opening Hours

Monday	Closed
Tuesday	Closed
Wednesday	09:00–17:00
Thursday	09:00–17:00
Friday	09:00–17:00
Saturday	12:00–17:00
Sunday	12:00–17:00

### Tickets & Reservations

- Planetarium shows: €5/person
- Guided tours: €8/person
- Friday evening events: price varies, please see our programme

Tickets must be booked and paid for online, in advance. Our online system accepts VISA, MasterCard and American Express. Tickets can be bought also on site, at the ESO Supernova. However, we strongly recommend booking online, in advance, as our activities tend to be fully booked on the day. On site, we accept debit/EC and credit cards (VISA and MasterCard).

Please arrive at the ESO Supernova and print your ticket from one of our ticket printers. Unfortunately we are not able to offer refunds.

- Entry to the visitor centre and unguided tour of the permanent exhibition: free



- Unguided visit to the temporary exhibition: free

No prior booking is required for unguided visits to our permanent and temporary exhibitions. You can help us keep the entry to the exhibition free for everyone by making a donation of your choice. Donation boxes are located at our reception desk.

Teachers who would like to book an educational workshop should fill out the form at: <https://supernova.eso.org/education/>



### Useful Tips

- The ESO Supernova has vending machines with snacks and cold drinks in the picnic area in the basement, with an adjacent sun terrace. You are also very welcome to use the area to consume food and drink brought from home. We do not serve coffee or warm food. Please make sure to bring small change with you for the vending machines.
- No entry to the planetarium is permitted after the doors close. Please arrive at the latest 15 minutes before the show starts. This policy is strictly respected for safety reasons and to ensure the best experience for our visitors.
- Guide dogs are welcome. Unfortunately, no other dogs are allowed, including dogs which can be carried or fitted into bags.
- Any kind of photography, including with a phone, is forbidden inside the planetarium, but it is allowed in the exhibition area. Please avoid using flash so as not to disturb other visitors and be aware that families might not want their children to be photographed.

### How to Get Here

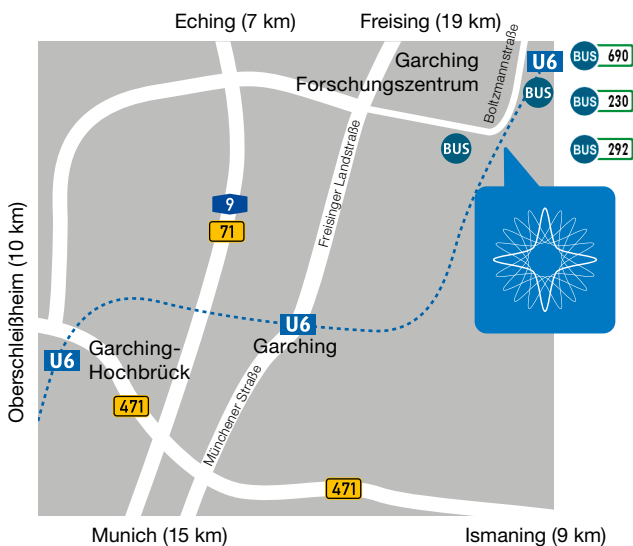
The ESO Supernova is located 2 km north-east of Garching and about 15 km north-east of Munich in the “Forschungszentrum” area.

**GPS:** 48° 15' 36.90" N, 11° 40' 15.16" E

**By car:** Take the A9 exit Garching-Nord (Garching-North), which leads you to the “Forschungszentrum” area. Go straight ahead at the traffic lights. ESO is located in the south-east corner of the campus, which is in front of you as the road turns left.

**By subway:** The ESO Supernova is only four minutes on foot from the final station of the U6 line, Garching Forschungszentrum.

**By bus:** Bus stop on Boltzmannstraße: Bus 292 via Oberschleißheim, Bus 230 via Ismaning and Bus 690 via Eching.



Parking is available in front of the ESO Supernova but we recommend using public transport. Parking for coaches is available behind the main ESO Headquarters building. Please advise us in advance if you will be travelling by bus. Disabled parking is available close to the entrance.

Once you see the ESO logo sign, walk straight ahead and then take the first street right.





Only on  
screen in  
**March!**

# Aurora

Lights of Wonder

**METASPACE**  
Visualize your Imagination

Aurora Photography & VR Video by KWON O CHUL  
In Association with COSMODREAM, DONG A SCIENCE and METASPACE  
CG Metaspac Eyedin | Animation Floating Island | Music Kim sujin | Sound Yoo Mun-yeon

**HugMEDIA**  
by KWON O CHUL

ESO Supernova  
Planetarium & Visitor Centre

[supernova.eso.org](http://supernova.eso.org)

Karl-Schwarzschild-Str. 2, 85748 Garching bei München, Germany  
Phone: +49 89 32006 900 E-mail: [supernova@eso.org](mailto:supernova@eso.org)  
[www.eso.org](http://www.eso.org)

[f/ESOSupernova](https://www.facebook.com/ESOSupernova)    [t/ESOSupernova](https://twitter.com/ESOSupernova)

The ESO Supernova is a donation from the Klaus Tschira Stiftung.



Klaus Tschira Stiftung  
gemeinnützige GmbH



Heidelberg Institute for  
Theoretical Studies

