

## **Responsibility of Science**



**Germany, Darmstadt** 

04.08. - 11.08.2007

GEFÖRDERT VOM



Bundesministerium für Bildung und Forschung





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# Physics Department of



TECHNISCHE UNIVERSITÄT DARMSTADT

## Welcome to the ISSC 07!

We are happy to welcome you as participants in Germany. Hoping that you have had a nice journey, we are looking forward to the week of the International Summer and Science Camp. We are proud to present you a very mixed program where everyone will discover totally new fields. juFORUM's members are known for their open-mindedness and their interest in other disciplines. This year's ISSC program is closer to our annual congress' program than to the last year's ISSC program in Sweden. The reason for that is on the one hand our very good experience with this kind of event. On the other hand, the ISSC is a great chance for juFORUM to introduce itself. And we hope you like what we show you!

The motto "Responsibility of science" of the ISSC 07 was a sudden idea. But since we decided that, we heard and read everywhere about responsibility (perhaps we are just sensibilised now :-) ). So we are obviously totally in the spirit of the age. But regarding all the things that we heard and read, we don't consider our workshop as redundant, far from it! On the contrary, we believe that it is necessary to think about it, to try to define what responsibility of science could be and how it could be realized in today's life. We are curious what we are going to work out together!

We hope to fulfil your expectations and provide some surprises!

#### Your ISSC Organisation Team

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## Dos and Don'ts in Germany

- Try as many different kinds of bread as possible! Germany is famous for its breads. Perhaps there are better patisseries than the German one, but our whole-grain bread is unbeatable.
- See for yourself that Germans are friendlier and more humorous than assumed abroad ;-) We will try our best to convince you!
- Don't cross the street when the light is red German car drivers are not used to slow down for pedestrians...And you have the smaller crush zone.
- Be on time every one knows that Germans ALWAYS are ;-) A given time means that time and not half an hour later...Buses arrive usually quite on schedule. The Deutsche Bahn is an exception...
- Don't make any jokes about the Nazis. That's perhaps the only thing that Germans can't laugh about.
- Don't expect Germans to wear Bavarian leather pants and feather hats and eat Sauerkraut all the time ;-). There are Germans who think that Bavaria is not really a part of Germany even though Bavarian sights like Neuschwanstein castle or Bavarian beer are the first things foreigners think of.
- If you want to use the public transport, buy a ticket. There are many controls, paying the ticket is cheaper ;-).

## Most important vocabulary

| Yes                        | ja                         |
|----------------------------|----------------------------|
| No                         | nein                       |
| Good afternoon / evening   | Guten Tag / Abend          |
| Good night                 | Gute Nacht                 |
| Thank you                  | Danke                      |
| Please                     | Bitte                      |
| You're welcome             | Bitte                      |
| Hello! / Bye!              | Hallo! / Tschüß!           |
| Good bye                   | Auf Wiedersehen            |
| See you later              | Bis später                 |
| Excuse me                  | Entschuldigung             |
| I don't know.              | Ich weiß es nicht.         |
| I don't understand German. | Ich verstehe kein Deutsch. |
| Where is the youth hostel? | Wo ist die Jugenherberge?  |
| Can you help me?           | Können Sie mir helfen?     |
| How much is it?            | Was kostet das?            |

#### Program

#### Saturday, August 4th

Arrival & Check-in 14:00 - 17:00 Youth hostel Landgraf-Georg-Straße 119, 64287 Darmstadt Welcome by Orga Team 17:00 - 18:00 Youth hostel Dinner 18:00 - 20:00 Restaurant Braustüb'l Wilhelminenstraße 31, 64283 Darmstadt Night of nationalities 20:00 - 24:00 University Building S103 Room 175 Hochschulstraße 1, 64289 Darmstadt

#### Sunday, August 5th

Breakfast 8:00 - 8:45 Youth hostel

City rally 8:45 - 12:30 Start at youth hostel

Picnic 12:30 - 14:00 Park Rosenhöhe

Workshop Part 1 14:30 - 18:00 University S103/175

**Dinner** 18:00 - 19:00 University S103/175

Fun activity 19:00 - 21:00 University S103/175

#### Monday, August 6th

Breakfast 8:00 - 8:45 Transfer to city hall 8:45 - 9:00 Welcome by city and university 9:00 - 10:45 Transfer to ESOC 10:45 - 11:15 public transport ESOC 11:45 - 13:30 Robert-Bosch-Straße 5, 64293 Darmstadt Transfer to Lunch 13:30 - 14:00 Lunch 14:00 - 14:50 Restaurant Panino Schleiermacherstraße 2, 64283 Darmstadt Fraunhofer Institute for Computer Graphics 15:00 - 17:00 Fraunhoferstraße 5, 64283 Darmstadt

RoboCup 17:15 - 18:45 Simulation and Systems Optimization - Technical University University S202/C205 Transfer 18:45 - 19:15 public transport Dinner 19:15 - 21:00 Bavarian Biergarten *Kastanienallee 4, 64289 Darmstadt* Bat excursion 21:15 - 23:30 Woog island

#### Tuesday, August 7th – Heidelberg

Breakfast 8:00 - 8:45 Transfer to Heidelberg 8:45 - 10:00 Chartered bus, start at youth hostel Max-Planck-Institute for Astronomie 10:00 - 11:30 Königsstuhl 17, 69117 Heidelberg Magazine Stars and Space 11:30 - 13:00 Königsstuhl 17, 69117 Heidelberg Transfer to City 13:00 - 13:15 Free Time in the City 13:15 - 19:00 Dinner 19:00 - 21:00 Restaurant Zeughaus Marstallhof, 69117 Heidelberg Guided city tour 21:00 - 23:00 Alte Brücke, 69117 Heidelberg Transfer to youth hostel 23:00 -24:00

#### Wednesday, August 8th

Breakfast 8:00 - 8:45

IANUS - Lecture Responsibility 9:00 - 10:30 Richard Finckh University S103/175 Workshop Part 2 10:30 - 12:40 University S103/175 Lunch 12:45 - 13:30 Cafeteria Transfer to GSI 13:30 - 14:00 Chartered bus GSI - Society for Heavy Ion Research 14:00 - 16:00 Planckstraße 1, 64291 Darmstadt Coffee break 16:00 - 16:30 Lecure Physics of Star Trek 16:30 - 17:30 Prof. Dr. Markus Roth Transfer to City 17:30 - 18:00 Museum of the state Hessen 18:00 - 20:00 Friedensplatz 1, 64283 Darmstadt Dinner 20:00 - 21:00 University S103/175

#### Thursday, August 9th – Frankfurt

Breakfast 8:00 - 8:45
Transfer to Frankfurt 8:45 - 10:30
Public transport
University of Frankfurt 10:30 - 13:30
Biology and Biochemistry
University campus Riedberg
Lunch 13:30 - 14:30
Cafeteria
Transfer to City 14:30 - 15:30
Palmengarten 15:30 - 16:30
Siesmayerstraße 61, 60323 Frankfurt am Main
Free Time in the City 16:30 - 22:45

If you want: View from a skyscraper 16:30 - 22:45 Helaba Neue Mainzerstraße 52 - 58, 60311 Frankfurt Last train back to Youth hostel 22:51 - 23:50 Departure 22:51 at Hauptwache – S3 to Darmstadt Arrival 23:25 at Darmstadt Hbf Departure 23:38 at Darmstadt Hbf – Bus H to Kesselhutweg Arrival 23:45 at Luisenplatz Departure 23:45 at Luisenplatz – Bus L to Ostbahnhof Arrival 23:50 at Woog Up to 22:51, there is a similar connection every 30 minutes.

#### Friday, August 10th

Breakfast 7:45 - 8:30 Transfer to Merck 8:30 - 9:00 Chartered bus Merck 9:00 - 12:45 Frankfurter Straße 250, 64293 Darmstadt Lunch 12:45 - 13:30 Merck's Cafeteria Transfer to City 13:30 - 14:00 Workshop Part 3 14:00 - 18:30 Barbecue 19:00 Barbecue area close to Woog

#### Saturday, August 11th

Breakfast 8:00 - 8:45

**Departure** Good bye!

## **ESOC** - European Space Operations Centre

Since its creation in 1967, the European Space Operations Centre (ESOC) has planned missions, operated more than 50 satellites and ensured that spacecraft meet their mission objectives. The mandate of ESOC is to conduct mission operations for ESA satellites and to establish, operate and maintain the necessary ground segment infrastructure.

ESOC's involvement in a new mission normally begins with the analysis of possible operational orbits or trajectories and the calculation of the corresponding launch windows - selected to make sure that the conditions encountered in this early phase remain within the spacecraft capabilities. The selection of the operational orbit is a complex task with many trade-offs involving the scientific objectives of the mission, the launch vehicle, the spacecraft and the ground stations. Once the final orbit has been selected, the ground stations, which are used to communicate with the satellite, are selected according to the mission phase and what has to be done.

http://www.esa.int/

## IGD - Fraunhofer Institute for Computer Graphics

IGD focuses on the development of product prototypes (hard- and software) and the realization of concepts, models and solutions for computer graphics and its adaption to specific application requirements. The work is rounded off by object-oriented basic research projects and the realization of single devices and computer graphics systems with pilot character (e.g. virtual and augmented reality, mobile computing and security technologies). About 200 full-time researchers deal with all aspects of computer graphics and its applications. They perform about 300 studies, research projects and product prototype developments per year.

http://www.igd.fhg.de/

## The MPI for Astronomy

The Max Planck Institute for Astronomy (MPIA) is located on the Königstuhl Mountain near Heidelberg. It is one of about 80 institutes of the Max Planck Society. Its establishment in 1967 was based on the realization that a supraregional institute equipped with powerful telescopes would be needed in order to be internationally competitive in astronomical research. Together with the Center for Astronomy at the University (ZAH) and the Department of Astro- and Particle Physics at the MPI for Nuclear Physics, it constitutes a worldwide renowned center of astronomical research in Heidelberg.

The Institute is dealing with the preparation and analysis of astronomical observations and the development of new measuring methods. Two fields of scientific research are given priority at MPIA. One is the formation and evolution of stars and planets in our cosmic neighborhood. This also concerns the question: Is the Sun with its lifeharboring planet Earth unique or can conditions suitable for life also be found around other stars, at least around the numerous solar-like ones? The second research focus at MPIA, galaxies and cosmology, is on a better understanding of the evolution of the present-day highly structured universe with all its galaxies and stars and how it developed from a simple initial state shortly after the big bang.

http://www.mpia.de/

## GSI - Gesellschaft für Schwerionenforschung

The goal of the scientific research conducted at the Gesellschaft für Schwerionenforschung, GSI, is to understand the structure and behavior of the world that surrounds us. In addition to broadening our understanding of the world, this knowledge also serves as a basis for technological progress in all areas of our lives.

GSI operates a large, in many aspects worldwide unique accelerator facility for heavy-ion beams. Researchers from around the world use the facility for experiments that help point the way to new and fascinating discoveries in basic research. In addition, the scientists use their findings to continually develop new and impressive applications. The research program at GSI covers a broad range of activities extending from nuclear and atomic physics to plasma and materials research to biophysics and cancer therapy. Probably the best-known results are the discovery of six new chemical elements and the development of a new type of tumor therapy using ion beams.

http://www.gsi.de/

## Merck KGaA

Merck is the world's oldest pharmaceutical and chemical company, with roots dating back to 1668. From the start of industrial production in 1827 to first research into liquid crystals more than 100 years ago up to the entry into targeted cancer therapy with the launch of Erbitux© in 2003, many milestones in the company's history provide strong evidence of the pioneering spirit of the people at Merck. The Pharmaceuticals business sector comprises branded prescription drugs, e.g. for the treatment of cancer, neurological and growth disorders, cardiovascular diseases and infertility. The product range of this business sector also includes consumer health care products. The Chemicals business sector offers chemicals for high-tech applications: liquid crystals for displays, effect pigments for industry and cosmetics, analytical reagents and test kits, as well as products and services along the entire process chain of the pharmaceutical and biotech industries.

http://darmstadt.merck.de/

## IANUS - Interdisciplinary Working Group on Science, Technology and Security

IANUS was founded in 1988 as a cooperation between students and scientists of several disciplines, to work with a problem-oriented, scientific approach to peace studies. Since then, IANUS developed to a scientific institution within TU Darmstadt. The focus of our current work is the analysis of the role of research and technology within societal conflicts, combined with the formulation of possibilities for future action. Strategies of coping with "ambivalence", whilst heading for sustainability, security and peace, are applied to various thematic fields (e.g. nuclear technologies, control of bio-weapons, stem cell research).

http://www.ianus.tu-darmstadt.de/

### Wissenschaftsstadt Darmstadt

Considering the number of its inhabitants Darmstadt is not one of the largest cities in Germany. But it is actually on top position in various rankings in Germany and Europe. Its sustainable mix of branches in the economy is based on the presence of high-class research and development institutions. Present branches in Darmstadt are primarily the IT branch, the pharmaceutical sector, biotechnology, mechatronics and the cosmetics branch. Over 30 research institutions, which include four Fraunhofer Institutes, the GSI and two Universities of Applied Sciences, are resident in Darmstadt. The Technical University of Darmstadt with its 17,000 students has an exellent reputation. Darmstadt has a preferable location in the centre of Europe. And with the european space agencies ESOC and Eumetsat, Darmstadt is a capital for european space operation. Besides that, the city offers a charming environment of a beautiful landscape with the Odenwald mountain region, the wine-growing area along the mountain road Bergstraße and nearness to the rivers Rhein, Main and Neckar.

http://www.darmstadt.de/

#### Bars, cafés and pubs in Darmstadt

Café Chaos A student café worth seeing, they have Lassi (indian yogurt drink) and lots of other tasty things. Not to expensive, includes an "automate museum" (on the way to toilet, you can buy almost everything).  $M\ddot{u}hlstraße~36$ 

Café Lotte Very cosy café not far from the youth hostel. Soderstraße 116

**Coyote Cafe Bar & Restaurant** A stylish local situated in a house designed by Hundertwasser with a great view over Darmstadt. Not cheap but expensive not either. *Waldspirale 8* 

**Starbucks Coffee** You probably know it from home – Expensive but many different sorts of coffee and sweets. *Luisenplatz* 

Café Blu Very puristic athmospere, nice breakfasts and not to expensive. Lauteschlägerstraße 28

**Salve** In the pedestrian zone in a house corner, great to watch other people walking by. Wilhelminenstraße 2

Havana Latin restaurant and bar, many cocktails. Lauteschlägerstraße 42

**Corroboree** Australian restaurant and bar, you can eat can garoo or just a simple burger. But afterwards, you have to try the dessert named "Death by chocolate". Kasinostraße 4 - 6

Hotzenplotz More a restaurant than a pub, very rustical, lots of students. Mauerstraße 34

Hobbit THE student pub in Darmstadt, very small but cosy. Lauteschlägerstraße 3

Brasil Latin restaurant and bar, many cocktails. Kopernikusplatz 1

Hemmingway's Terraza Stylish latin restaurant and bar, many cocktails, not that cheap. Sandstraße 30

K&K Nostalgic café in the "Carree" (pedestrian zone), very tasty cakes and pies. *Im Carree 1* 

## Europastadt Frankfurt am Main

Frankfurt describes itself as the smallest metropolis in the world, the most international city in Germany and the largest financial centre on the continent. Almost one in three of the people living in Frankfurt do not hold a German passport. No matter where visitors come from, they will always meet people in Frankfurt who speak their language and a restaurant that serves their favourite food. The open and hospitable atmosphere in Frankfurt stems from its centuries-old role as a trading centre. Those who think of the city on the Main, think of the airport, the Paulskirche and Goethe, think of the Stock Exchange, the Book Fair and the skyline. Frankfurt brings opposites together in a charming way. The flair of the global city is just a few steps away from the atmosphere of the old town. Part of the unmistakeable character of the city on the river are the museums on the banks of the Main, the fascinating high-rise architecture, the thinkers of the Frankfurt School just as much as the Grüne Soße (a herb sauce, a speciality of Frankfurt), Ebbelwei (Apfelwein or cider) and Frankfurter sausages.

http://www.frankfurt.de/

## Sight seeing in Frankfurt

#### Helaba/Maintower - the 2nd highest skyscraper

When the Main Tower was completed in 1999, even the people of Frankfurt, who are spoilt by the city's skyline, were impressed. A high-rise building with a façade made entirely of glass was built for the first time in Europe. In fact, the Main Tower consists of two high-rise buildings that are interlinked with one another. One is square, 170 metres high and the other is a round building 199.5 metres high with non-reflective glass. For the statics of the Main Tower, 112 bored piles (diameter 120 to 180 cm) are set 50 metres deep in the ground. The base section integrates the listed façade of the predecessor building, thus creating a link between the past and present.

This high-rise building is particularly popular with the people of Frankfurt and tourists. It is the only one in the city that has a publicly accessible viewing platform with restaurant. Furthermore, Europe's highest radio and television studio is located on its 53rd/54th floor.

MAIN TOWER (Landesbank Hessen-Thüringen) Neue Mainzer Straße 52-58, 60311 Frankfurt am Main

#### Palmengarten - the green oasis in the heart of Frankfurt

The Palmengarten is a trust established by the citizens of Frankfurt in 1868. On 50 acres, the gardens display numerous beautiful and interesting plants throughout the year. In addition, the Palmengarten offers a variety of recreational activities including guided tours, summer concerts, evening festivals and exhibitions. The Palmengarten is worth a visit at any time of the year.

The Palmengarten is known world-wide for its ample collections of tropical plants. With 5000 m<sup>2</sup>, the Tropicarium is one of the largest complexes of greenhouses. It displays tropical plants including orchids, bromelias, palms, ferns, succulents and many others. These plants are arranged largely according to their natural habitats such as rain forest, mangrove, mountain rain forest, monsoon and tradewind forest, savannah, thorn forest and different types of vegetation approaching desert. The large Palmenhaus was constructed in 1869 and built on to the Gesellschaftshaus. It displays many palm species as well as a variety of other, mainly sub-tropical plants. The new gallery of the Palmenhaus is used for flower shows and informative exhibitions. Rare blooms are on display in the horticultural Blütenhaus.

Palmengarten Siesmayerstraße 61, 60323 Frankfurt am Main

#### Historical Heart of Frankfurt - City Center

#### Dom – Cathedral

Saint Bartholomeus Cathedral (Dom Sankt Bartholomäus) is a Gothic building, which was constructed in the 14th and 15th centuries on the foundation of an earlier church from the Merovingian time. It is the main church of Frankfurt. From 1356 onwards, kings of the Hol Roman Empire were elected in this church, and from 1562 to 1792, emperors were crowned here. Since the 18th century, Saint Bartholomeus' has been called "the cathedral" by the people, although it has never been a bishop's seat. In 1867, the cathedral was destroyed by a fire and rebuilt in its present style. The height of the cathedral is 95 m.

Visitors can climb up its tower between April and October. The Cathedral museum houses treasures such as a Gothic liturgical vestment from 1350 and a gold-plated shining monstrance from 1720. Domplatz, 60311 Frankfurt am Main

#### Old Nicolai Church and Römerberg

When you arrive on the Römerberg, on the southern side of the great square there is the Old Nikolai Church (Alte Nikolaikirche). It was the chapel of the Imperial Court from 1290 until the 14th century. The daily chimes at 9 a.m. and 12 noon are worth hearing. In the centre of the Römerberg stands the Fountain of Justice ("Gerechtigkeitsbrunnen"). When an emperor was crowned, the people of Frankfurt could enjoy themselves here. Not only water flowed but also wine, and the people of Frankfurt could smell the aroma of "ox on the spit". The Emperors meanwhile enjoyed themselves at the banquet feast. Today, in general, the entire city hall complex is referred to as the "Römer". The actual "Römer", however, is only the middle one of three houses with its characteristic stepped gables. It has served as a town and city hall since 1405. The Emperors' Hall is situated on the first floor. All 52 emperors who ruled the Empire from 768 to 1806 are immortalised here in oil paintings. The square is lined by historical timber-framed buildings as in the past. They bear sonorous names such as "Großer Engel" (Great Angel), "Goldener Greif" (Golden Griffin) or "Schwarzer Stern" (Black Star). The houses were faithfully reconstructed according to the originals as if the dreadful night of bombing in March 1944 had never taken place, a night in which they all, along with the entire old part of the city, were destroyed. Römer

Römerberg 27, 60311 Frankfurt am Main

#### Paul's Church – where the National Assembly first met in 1848

The Paulskirche is a church with important political symbolism in Germany. It was opened as a Protestant church in 1789, coinciden-

tally the same year as the French Revolution, and in 1848-1849 it became the seat of the Frankfurt Parliament, the first publicly and freely elected body of Germany. The church started with the construction of the oval-shaped central church building in 1789. It was completed from 1829 to 1833, whereupon the organ loft was disconnected in 1833. Because of its centralized form and dome, it was desired as the meeting place for the Frankfurt Parliament in the course of the German revolutions of 1848. From March 31 until April 3, 1848 it was the meeting place for the "Vorparlament", which prepared the election for the National Assembly. On May 18, 1848 the National Assembly met for the first time in the church, and was, therefore, named the "Paulskirchenparlament". Until 1849, the National Assembly worked in the church to develop a constitution for a united Germany. After 1852, the Paulskirche was again used for religious services. In World War II, the church was nearly destroyed. As a tribute to its symbolism of freedom and as the cradle of Germany it was the first building to be rebuilt in Frankfurt after the war, reopened on the 100th anniversary of the Frankfurt Parliament. After the war, it was no longer used as a church, and instead became a center used for various displays and events. Commemorative plaques on its facade recall famous politicians and honorary citizens of the city; on its north side a monument reminds us of the victims of National Socialism.

Paulskirche

Paulsplatz 11, 60311 Frankfurt am Main

#### **Concert House Old Opera**

Alte Oper, Frankfurt's famous opera house, was built in 1880 by the architect Richard Lucae. It was one of the major opera houses of Germany, until it was destroyed in World War II. It was not until 1981 that the old opera was fully rebuilt and reopened. Today it functions as a concert hall, while operas are performed in the Oper Frankfut. The inscription on the frieze of the Old Opera says: "Dem Wahren, Schönen, Guten" ("To the true, the beautiful, the good"). Alte Oper Frankfurt - Konzert- und Kongresszentrum GmbH Opernplatz 1, 60313 Frankfurt am Main

## **Museums in Frankfurt**

#### Frankfurt Goethe-Museum and Goethe-House

The Frankfurt Goethe House, birthplace of Germany's most famous author and poet, Johann Wolfgang von Goethe, was built in the typical 18th-century bourgeois style. It is decorated with period furniture and paintings, providing an authentic and striking impression of the environment in which Goethe spent his youth. The Goethe Museum, a gallery of paintings from the Goethe era, elucidates Goethe's relationship to the art and artists of his epoch.

Großer Hirschgraben 23 - 25, 60311 Frankfurt am Main

# Senckenberg Museum Research Institute and Natural History Museum

The Senckenberg Museum is one of the largest Natural History Museums in Germany and exhibits the recent biodiversity of life and evolution of organisms as well as the change of planet earth over millions of years. New findings in all areas of biology, paleontology and geology are displayed. *Senckenberganlage 25* 

#### Museum für Moderne Kunst

The Museum für Moderne Kunst (MMK) was opened in 1991 and is today one of Europe's leading museums. Designed by the Viennese architect Hans Hollein, the MMK is one of the most spectacular museum buildings of the post-modern. A visit to this modern art museum is an indispensable cultural experience in Frankfurt. The MMK collection includes high-grade works of European and American art of the 60s to current positions of international contemporary art. Regular special exhibitions presented in context of the collection allow MMK to reassess its position as museum and as place of permanent change of perspectives. The key goal of MMK is to build up and communicate a collection of contemporary art. Domstraße 10, 60311 Frankfurt am Main

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#### Museum+Science+Technology

Hidden in a former World-War-II air-raid bunker one finds the worlds most outstanding collection of optical illusions, 3-D stereo photography, holography, 3-D magic-eye random dots, 3-D stereo art, anamorphoses, inconceivable mathematical figures, hollow masks, precinema techniques, puzzle pictures, distorted Ames Room, Kepler Star and much more. The interactive objects are well-suited for children of all ages.

Glauburgplatz 1, 60318 Frankfurt am Main

#### Schirn Kunsthalle Frankfurt

The SCHIRN KUNSTHALLE FRANKFURT is one of Europe's most renowned exhibition institutions. Since 1986, more than 170 exhibitions have been realized, among them major surveys dedicated to Vienna Art Nouveau, Expressionism, Dada and Surrealism, the history of photography, topical positions in sound art, to subjects like shopping and the relationship between art and consumerism, the visual art of the Stalin era, the Nazarenes, or the new Romanticism in present-day art. Artists such as Wassily Kandinsky, Marc Chagall, Alberto Giacometti, Frida Kahlo, Bill Viola, Arnold Schönberg, Henri Matisse, Julian Schnabel, James Lee Byars, Yves Klein, and Carsten Nicolai were presented in comprehensive solo shows. *Römerberg, 60311 Frankfurt am Main* 

#### Städel Museum

The Städel, directly situated on Mainufer, is today one of the oldest and significant museum foundations in Germany and one of the world's most outstanding art museums. The Städel collection presents works of art from seven centuries. Renowned paintings from the Middle Ages to the present are complemented by a collection of selected sculptures. Highlights from the collection of old masters include works by van Eyck, Botticelli, Dürer, Rembrandt and Vermeer. The Städel offers a unique overview of leading impressionists (Monet, Degas, Renoir), expressionists (Kirchner, Beckmann, Macke) through to important representatives of the modern (Picasso, Klee, Dix). Paintings by Yves Klein, Georg Baselitz and Francis Bacon confront with positions of post-war art. The Graphic Collection presents its superb repository of graphic prints and drawings in changing exhibitions. Furthermore, international special exhibitions stamp the image of the Museum.

Schaumainkai 63, 60596 Frankfurt am Main

#### **Museumsufer-Ticket**

The Museumsufer Ticket is a two-day ticket for Frankfurt's museums designed for city visitors in transit, tourists, fair and congress participants. The two-day ticket is valid on two consecutive days. When museums are closed on the day following day of purchase, the period of validity extends by one extra day. The ticket grants admission to all \*permanent and special exhibitions in 26 museums and galleries. \*For special exhibitions where the admission price exceeds €5, MUF-Ticket - holders pay only the reduced admission price requested.

The Museumsufer Ticket is available:

- as personal ticket for  ${\in}12$
- as family ticket for two adults and children for  $\notin 20$
- as reduced ticket  $\leq 6$

The Museumsufer Ticket is in all participating museums:

- Archaeological Museum
- Bibelhaus am Museumsufer Erlebnismuseum
- Cathedral Museum Frankfurt
- Deutsches Filmmuseum / Deutsches Filminstitut DIF e.V.
- Frankfurter Kunstverein
- Fotografie Forum international

- German Architecture Museum
- Goethe Museum/Goethe House
- Heinrich-Hoffmann-Museum / Struwwelpeter-Museum
- Historical Museum
- Icon Museum
- Institute for City History
- Jewish Museum
- Liebieghaus Sculpture Collection
- Money Museum of the Deutsche Bundesbank
- Museum for Communication
- Museum Giersch
- Museum of World Cultures
- Museum of Applied Art Frankfurt
- Museum of Modern Art
- Museum Judengasse
- Portikus<sup>1</sup>
- Schirn Art Hall Frankfurt
- Senckenberg Research Institute and Natural History Museum
- Städel Museum
- Stoltze Museum of the Frankfurt Sparkasse<sup>1</sup>

 $<sup>^{1}</sup>$ Admission generally free

## Bars, cafés and pubs in Frankfurt

#### Sachsenhausen

Old Sachsenhausen, with its apple wine pubs, the historic half-timbered houses and narrow alleys stands for Frankfurt's cosiness and hospitality. No sojourn in Frankfurt is complete without a quick visit for a glass of the renowned "Frankfurt Ebbelwei" The main street of Sachsenhausen is Schweizer Straße, a cosmopolitan boulevard with bars and two of Frankfurt's most traditional cider houses, Zum gemalten Haus and Wagner. More bars, restaurants and cafés can be found in the "Kleine Rittergasse" and "Große Rittergasse".

#### Bockenheim - the student's district

Around the main campus of Frankfurt University there are situated a lot of nice pubs and restaurants with mostly student public. You find a lot more than this small selection on the "Leipziger Straße".

Albatros one of THE student cafés in Frankfurt, you can get good meals for less than 10 euros, charming atmosphere. *Kiesstr.* 27

Café Extrablatt located in front of the main campus, "normal" café, meals available *Bockenheimer Landstr.* 141

Sausalitos a American Mexican restaurant, very broad cocktail card Kiesstr. 41

Casablanca located in backyard, this pub is really a kind of insider tip, very nice for long summer evenings Adalbertstr. 36

Joe Penas Cantina Bar serves a wide selection of cocktails, mexican kitchen (Fajitas, Burritos and Enchiladas) Robert-Mayer-Str. 18

#### City

**Club Voltaire** A haven for poets, musicians, activists, and other liberal types, Club Voltaire offers daily readings and other events, plus hearty traditional food and a good selection of beer and apple wine.

Reasonable prices and a welcoming (and open-minded) atmosphere ensure a loyal following of regular customers. *Kleine Hochstrasse 5* 

Luna Bar City Center. An international magazine once called this the best cocktail bar in Germany, and many people continue to agree. Stiftstrasse 6

21. Jahrhundert Almost too cool to hang out in - or so is their intent. This frequently visited cocktail bar and lounge sets out 21st century style with a nightly DJ and posh cocktails and attracts the slick as well as those hoping to absorb a little of the excess style. Oeder Weg 21

Metropol Always warm and brightly lit, this centrally located café has fantastic oversized sandwiches and salads as well as some of the best homemade cakes in town. A view of St. Bartholomew's cathedral, as promised, is the perfect background setting to swill down rich ... Weckmarkt 13-15

**Café and Bar Celona** Be wary of hitting this already favourite Frankfurt café just after 18:00, as it is located in the heart of Frankfurt's banking district and locals have quickly caught on to its great atmosphere, low prices, and impressive outdoor seating arrangement. *Holzgraben 31* 

**Chicago Meatpackers** Official American Restaurant of FRANKFURT-GALAXY (the football team), very cool atmosphere with a modellrailway over your head! Untermainanlage 8 – next to European central bank

Yours Australian Bar If you ever wanted to try kangaroo or emu – this is the chance, they serve very good "down under" food and cocktails. Schillerpassage

## Universitätsstadt Heidelberg

Heidelberg, with its 140,000 inhabitants, is known all over the world for its romanticism and beauty. Every year millions of tourists are drawn to experience Heidelberg's mystique. Heidelberg was included in the preliminary German list for registration as a UNESCO World Heritage site. The city of the oldest university in Germany (established in 1386) looks back on over 800 years of history. Modern Heidelberg attracts people with its forward-looking science and research activities, is a quickly growing business location and the lively centre of the Rhein Neckar Triangle. A number of outstanding research institutions such as the German Cancer Research Center, the University's research institutes, EMBL, EURESCOM, four Max Planck Institutes and the research centres of IBM, Nec and ABB are based here.

http://www.heidelberg.de/

## Sight seeing in Heidelberg

#### Heidelberg castle

The ruins of Heidelberg Castle rise majestically on the site of a medieval castle complex high above the lanes and the picturesque jumble of roofs of the old town. The architecture contains elements of the Gothic and Renaissance periods. The castle gardens, the Great Vat, the world's largest wine barrel and the remarkable Pharmacy Museum are also worth a visit.

#### Student karzer

Behind the university is the student karzer, the cells where, between 1778 and 1914, the university administration jailed students for minor offences. Lots of funny inscriptions from the jailed students on the walls. One of my favourites! Augustinergasse 2

#### Philosophenweg

The "Philosophenweg" gets its name from the fact that Heidelberg's philosophers and university teachers are said to have once walked and talked here. Even today, this world-famous path offers new sights and insights. Many sub-tropical plants flourish in the "Philosophengärtchen". The temperate climate is perfect for Japanese cherries, cypresses, lemons, bamboos, rhododendrons, gingko and yucca trees, and several other plants from the Mediterranean, North Africa and Asia.

Joseph Freeherr von Eichendorff (1788-1857) is one of the German poets who fell in love with Heidelberg and dedicated poems to the old town. A commemorative stone refers to the German Romantic who studied here 1807-08.

#### The Church of the Holy Spirit

A late Roman basilica was first mentioned in 1239. In 1398, it was replaced by a large church building which nave was constructed in the typical style of the late Gothic period. The chancel was completed by 1410, the building of the nave took until 1441. There was also a delay in the construction of the church tower which was started again in 1508.

The chancel contained the tombs of the Prince Electors of the Palatinate. Of the originally 54 epitaphs, the only one to remain was the one of Prince Elector Ruprecht II (1352 - 1410).

During the 30 Year's War, however, the complete collection became the booty of Heidelberg's conqueror, commander Tilly. Following orders of the Catholic Prince Elector Maximilian of Bavaria, the library was given to the Pope of Rome. Of the collection which once included more than 5000 books and 3524 manuscripts, only 885 manuscripts were returned to Heidelberg in 1816.

During the following centuries, the church frequently changed its religious denomination and was used at different times by Catholics as well as Protestants. Even a partition barrier was erected in 1706 because both denominations wanted to hold service here. For 230 years, the barrier stayed in its place until it was removed in 1936. Today, the Church of the Holy Spirit is a Protestant Church.

#### The Old Bridge

The four preceding bridges were constructed of wood. They were destroyed by floods, fire and ice. Prince Elector Karl Theodor was the first ruler to construct a stone bridge which was erected from 1786 to 1788. The medieval bridge gate on the town side was originally part of the town wall. Baroque tower helmets were added during the erection of the stone bridge in 1788. There is a plaque referring to the defense of Heidelberg against French troops. On October 16, 1798, a brave Austrian regiment commanded by Prince Schwarzenberg succeeded in repulsing the advancing French Army. The West Tower contains dungeons, whereas the East Tower holds a spiral staircase. A few steps east of it visitors will find the "Tränktor" (Drinking Gate). During the Middle Ages, cattle were driven through this gate to their drinking places. The two bays of the bridge carry monuments created by Franz Konrad Linck (1730 - 1793) who, since 1763, was the Prince Elector's official court sculpture.

## Introducing: juFORUM e.V.

#### Who we are and what we do

juFORUM e.V. is a registered non-profit association founded in 2000 by twelve former participants of the Jugend forscht contest, a German science fair for students aged 16 to 20. juFORUM's founders wanted to keep in touch with each other beyond the science fair itself and also wanted to create a network of like-minded young researchers.

Currently the association has approximately 200 members. The majority of our members are students aged from 18 to 25, including some PhD students and young professionals.

Creating an opportunity to peek inside science and research related industries, fostering innovation, expanding members current knowledge, developing a contact pool and building a young reseachers' network these are the goals and challenges!

Our members come together at the JufoCongress which is held annually in alternating cities throughout Germany. The participants visit research facilities and companies involved in research & developing and enjoy a multi-faceted cultural program. Furthermore, the JufoCongress provides a platform to discuss recent scientific developments, cultivate old friendships and make new friends.

Aside from regular face-to-face meetings, networking inside of juFO-RUM is supported by our internet platform.

As well as national activities, we organize a variety of meetings and events which support young people committed to science. Representatives of juFORUM visit most of the science fairs throughout Germany to interact with participants and organizers, and to experience the unique atmosphere of these events.

In our mentoring program, we conduct seminars for highschool teachers and interested students to provide first-hand information about scientific contests from the perspectives of participants, supervisors and organizers. Thus, we tear down stereotypes and encourage scholars to start their own science project.

#### Why become a member and what does a membership stand for?

Very good question! Surely, you can take part in our activities without being a member - even though most participants want to become a member instantaneously as they get to know us ;-). But somebody has to do the work, right? This is achieved by our members.

Sounds like a lot of work? That's right, but no pain, no gain! Fortunately, new members don't have to manage the executive business - we offer various fields of activity, e.g. press and public relations, membership issues, cash auditing, sponsoring, design of our webpage, IT support etc. Each of the activities provides the opportunity to dive deeper into juFORUM's matters and maybe you'll find that it's a lot of fun to help us actively building a young researcher's network. Be part of it, help us to propagate the concept of a young researcher's network, instantiate your own ideas and sozialize with like-minded young researchers!

#### Let's go!

Contact us! Feel free to approach us any time during the ISSC or send an e-Mail to mitgliedschaft@juforum.de. More information about ju-FORUM e.V., recent news and current activities can be found on our webpage http://www.juforum.de.

We hope to welcome you as a new member of juFORUM e.V., soon!

## Contact

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Host of the 2nd ISSC 2007 is juFORUM e.V. – Das Jungforschernetzwerk. juFORUM e.V. is a registered non-profit organisation in Germany.



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