# XXth International Conference on Neutrino Physics and Astrophysics (Neutrino 2002)

May 25-30, 2002 Munich, Germany

# Bulletin 2 - The Final Bulletin - May, 2002

#### **General Information:**

The XXth International Conference on Neutrino Physics and Astrophysics (Neutrino 2002) will be held in Munich, Germany from Saturday May 25 to Thursday May 30, 2002 on the main campus of the Technische Universität München (TUM) in the center of Munich.

The conference is organized jointly by the Technische Universität München (Department of Physics), Munich and the Max Planck Institute of Physics (Werner Heisenberg Institute), Munich.

Information about the conference is available on the conference web site: http://neutrino2002.ph.tum.de/

Exciting new experimental and theoretical results in the field of neutrino physics, astrophysics and cosmology are expected to be presented at the Neutrino 2002 Conference. The scientific program will cover the latest developments in neutrino physics and related topics through **invited talks**, a **poster session** and **displayed papers**.

Participation is by invitation only and invitations were sent out starting early fall 2001.

The **web site will contain up to date information** about the conference arrangements and will provide in time forms for online registration and accommodation requests for invitees and their companions.

The Neutrino 2002 Organizing Committee has planned a social program which includes excursions to famous attractions of Bavaria, entertainment, dining and other social events. There is also an interesting program for accompanying guests during the conference. All this should make the conference and the stay in Munich very pleasant.

We look forward to seeing you in Munich in May 2002.

The Local Organizing Committee

Lists of conference sponsors, the international advisory committee, and the local organizing committee are to be found at the end of this bulletin.

## **Important Dates**

## Neutrino 2002 Conference Deadline:

Anonst 41 2002	Final deadline for contribution to the proceedings
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## Satellite Workshop before Neutrino 2002:



## **Special Events during the Conference:**

Sunday, 26.5.02, 17:45 Lecture Hall Plans for a new Journal on Astroparticle Physics Contact: H.Rubinstein Public Satellite Meeting

Monday, 27.5.02, 17:45 Lecture HallJHF-Kamioka neutrino oscillation experiment Contact: K.Nishikawa IUPAP Meeting (non-public)

Thursday, 30.5.02, 18:00 Grosser Senatssaal IUPAP Section C12 Meeting Contact: P.Kienle

# **Conference Program**

## **Scientific Scope:**

The program will consist of invited plenary talks and a poster session. Among the subjects covered are:

- Solar neutrinos
- Atmospheric neutrinos
- Short and long baseline neutrino oscillation experiments
- Neutrino factories
- Reactor/accelerator-based experiments
- Double beta decay
- Neutrino mass direct searches
- Neutrino telescopes
- Neutrinos in astrophysics and cosmology
- Dark matter searches
- Ultra-high energy neutrinos
- Other astrophysics and cosmology
- Future projects

## Conference Schedule for May 24 - 30, 2002

Friday	May 24		Registration and Refreshments
Saturday	May 25	Plenary sessions I	Alte Pinakothek & Welcome reception
Sunday	May 26	Plenary sessions II	
Monday	May 27	Plenary sessions III	Reception by the State of Bavaria
Tuesday	May 28	Conference excursion	Public Evening Lecture
Wednesday	May 29	Plenary sessions IV + poster session	Conference Dinner
Thursday	May 30	Plenary sessions V, Closing	

## **Conference Location:**

All talks will take place in the **Werner von Siemens Auditorium (Audimax)** on the central campus of the **Technische Universität München (TUM)**, located in the **central part of Munich**.

## Preliminary Scientific Program

## Saturday, 25.5.02

9:00	Welcome Addresses	W.Herrmann N.Schmitz F.v.Feilitzsch	20'
	Low Energy Neutrinos I:	(Chair: NN)	
9:20	The Sudbury Neutrino Observatory	A.Hallin	
	Start of Kamland	J.Shirai	
	Coffee Break		
	Low Energy Neutrinos II:	(Chair: NN)	
	Super-Kamiokande's Solar Neutrino Results	M.Smy	
	Progress in GNO	T.Kirsten	
	Measurement of the Solar Neutrino Capture Rate by the Russian-American Gallium Solar Neutrino Experiment During One Half of the 22-year Cycle of Solar Activity	V.Gavrin	
	Lunch Break		
	Low Energy Neutrinos III:	(Chair: NN)	
	Homestake	K.Lande	
	Recent Developments in the Borexino Project	G.Bellini	
	Future Projects and Summary of the Heidelberg Workshop	S.Schönert	
	Coffee Break		
	Low Energy Neutrinos IV:	(Chair: NN)	
	Fusion cross section measurements	C.Rolfs	
	Solar Models: An Overview	J.Bahcall	
	Interpretation of solar neutrino results	A.Smirnov	
10.20	Cuided Tours of the Alte Divertest of		
18:30	Guided Tours of the Alte Pinakothek		
20:00	Welcome Reception in the Immatrikulation Hall		

	Atmospheric Neutrinos I:	(Chair: NN)
9:00	Superkamiokande	M.Shiozawa
	Other atmospheric neutrino experiments	M.Goodman
	Coffee Break	
	Atmospheric Neutrinos II:	(Chair: NN)
	Atmospheric Neutrino Fluxes	T.Gaisser
	Future projects	T.Tabarelli de Fatis
	Lunch Break	
	Experiments at Accelerators I:	(Chair: NN)
	K2K Results	K.Nishikawa
	Nomad and Chorus	G.Fiorillo
	LSND and Karmen	G.Drexlin
	Coffee Break	
	Experiments at Accelerators II:	(Chair: NN)
	The miniBooNE Experiment: Status and Plans	R.Tayloe
	Results from NuTeV	D.Naples
	Global Analyses of Oscillation Experiments:	
	Neutrino oscillations - Global Analyses	E.Lisi
17:45	Satellite Meeting: Plans for a new Journal on Astroparticle Physics (public, Lecture Hall)	Contact: H.Rubinstein

## Sunday, 26.5.02

	Future Long Baseline Experiments I:	(Chair: NN)
9:00	Minos	D.Michael
	CNGS	S.Katsanevas
	Coffee Break	
	Future Long Baseline Experiments II:	(Chair: NN)
	The Physics Potential of Future Long Baseline Experiments	M.Lindner
	Future experiments with super neutrino beams	T.Nakaya
	Lunch Break	
	Future Long Baseline Experiments III:	(Chair: NN)
	Experiments at Future Neutrino Facilities	F.Dydak
	Neutrino Factory Designs and R&D	S.Geer
	Coffee Break	
	Theory:	(Chair: NN)
	Neutrino Oscillations Beyond Two Flavours	E.Akhmedov
	Standard and Non-Standard Neutrino Properties	J.Valle
	Neutrino mass models	S.King
17:45	Satellite Meeting: JHF-Kamioka neutrino oscillation experiment (public, Lecture Hall)	Contact: K.Nishikawa
20:00	Reception by the Bavarian State Government (Staatskanzlei)	

## Monday, 27.5.02

# Tuesday, 28.5.02

Conference Excursions		all day
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	Intrinsic Neutrino Properties:	(Chair: NN)
9:00	Direct Neutrino Mass Experiments: Present and Future	Ch.Weinheimer
	Neutrinoless double beta decay: review and future	O.Cremonesi
	Another Look at Neutrino Properties	J.Vuilleumier
	Coffee Break	
	Neutrinos in Astrophysics and Cosmology:	(Chair: NN)
	Supernovae and neutrinos	J.Beacom
	Neutrino Physics from Cosmological Observations	S.Hannestad
	Baryon asymmetry	T.Yanagida
	Lunch Break	
	Dark Matter:	(Chair: NN)
	Theory: Candidates, indirect methods	L.Bergström
	WIMP Direct Detection Overview	Y.Ramachers
	Experimental searches for axions and axion-like particles: An update	J.Collar
16:10	Poster Session (with coffee)	
20:00	Conference Dinner (Hofbräuhaus)	

## Wednesday, 29.5.02

	Cosmic Rays and Neutrino Telescopes I:	(Chair: NN)
9:00	Sources of UHE-neutrinos	E.Waxman
	Recent results and status of the Baikal experiment	G.Domogatsky
	Results from the AMANDA Neutrino Telescope at the South Pole	D.Cowen
	Coffee Break	
	Cosmic Rays and Neutrino Telescopes II:	(Chair: NN)
	Neutrino Telescopes in the Mediterranean	J.Carr
	Icecube - Status of the Next Generation Neutrino Telescope at the South Pole	A.Karle
	Lunch Break	
	Cosmic Rays and Neutrino Telescopes III:	(Chair: NN)
	Air Shower Arrays as Neutrino Detectors	A.Letessier-Selvon
	Alternative techniques	J.Learned
	Coffee Break	
	Conference Conclusions and Outlook:	(Chair: NN)
	Where Do We Stand, Where Are We Going? - Experiments	M.Spiro
	Where do we stand, where are we going? - Theory	B.Kayser
17:15	Concluding Remarks	G.Marx
18:00	Satellite Meeting: IUPAP Section C12 (non-public, Grosser Senatssaal)	Contact: P.Kienle

# Thursday, 30.5.02

## **Poster Session and Displayed Papers**

## **Displayed Papers:**

Conference participants will have the opportunity to display their recent papers. However, there will be **no formal contributed papers** and no reviewing of these papers at this conference.

### **Poster Session:**

The deadline for submitting posters has expired on 10 April 2002. The posters listed below have been accepted for display (status of May 8, 2002). Please inform the conference secretary at neutrino2002@physik.TU-Muenchen.de if there are any corrections or updates to your poster's title, list of authors, abstract, or links. We are willing to include links to your experiment's homepage, to the author's homepage, and to electronic versions of papers on which your poster is based. If you provide an electronic version of your poster, we will include it and link it to your abstract page.

### **Instructions for Displaying Posters:**

The available space for your poster is the European A0 format in portrait orientation, i.e. 84 cm horizontal and 119 cm vertical. Note that pinning the pages of a preprint to the poster board is not acceptable as a poster display - if that is what you intend to do, please retract your poster application and display your work on the preprint table. On Wednesday afternoon, May 29, 2002 there will be a formal poster session (see conference program). It is planned that you can begin posting your displays on Wednesday morning, and that the posters will then be displayed until the end of the conference.

### A. SOLAR AND REACTOR NEUTRINOS

- 1. A.Hamer for the SNO Collaboration Calibration of the SNO Detector
- 2. M.Dragowsky Sudbury Neutrino Observatory Neutron Calibration in the Pure D2O Phase
- 3. M.Boulay Event Reconstruction at the Sudbury Neutrino Observatory
- 4. J.Dunmore, J.Wilson & A.Marino for the SNO Collaboration The Salt Phase of the Sudbury Neutrino Observatory
- 5. N.Ferrari &L.Pandola Gallium Neutrino Observatory: Data Analysis and Systematic Error Reduction
- 6. J.-C.Lanfranchi Development of Highly Efficient Cryogenic Detectors for GNO

- 7. A. Di Credico CTF latest results in view of the Borexino experiment
- 8. O.Smirnov, O.Zaimidoroga & A.Derbin Search for the Solar pp-Neutrinos with an Upgrade of CTF Detector
- 9. C.Buck for the LENS Collaboration The LENS Project
- 10. D.Motta for the LENS Collaboration LLBF: LENS Prototype at Gran Sasso
- 11. Y.Zdesenko Background simulation and evaluation of XMASS experiment for the low energy solar neutrinos detection
- 12. Henry Tsz-king Wong Research Program of the TEXONO Collaboration: Status, Results and Plans
- 13. A. de Gouvea Solving the Solar Neutrino Puzzle with KamLAND and Solar Data
- 14. P.Aliani KamLAND Potentiality in the Post SNO-NC Era
- 15. R.G.Pizzone The 7Li(p,alpha)4He Fusion Reaction Studied Via the Trojan Horse Method and its Astrophysical Implications
- 16. B.C.Chauhan MSW Constraints on the Matter Density Profiles in the Solar Interior
- 17. Jai Sam Kim Full Numerical Estimation of Neutrino Mixing Parameters from Solar Neutrino Data
- 18. O.L.G.Peres Interference Effects Induced by a Non-Zero U\_e3 and Solar Neutrino Parameters
- 19. V.Antonelli

Phenomenological Analysis of the Recent Data on Solar Neutrino Physics and of the Forthcoming Experiments

#### **B. ATMOSPHERIC NEUTRINOS**

- 1. M.Sanchez Recent Atmospheric Neutrino Results from Soudan-2
- 2. M.Spurio Measurement of the Atmospheric Muon Neutrino Flux: MACRO Final Results

- 3. A.T.Habig The Many Uses of Upward-Going Muons in Super-K
- 4. A.Geiser &B.Kahle Earth Tomography with Atmospheric Neutrinos
- 5. M.Honda, M.A.Huang, T.Kajita, K.Kasahara &S.Midorikawa Further Study of Atmospheric Neutrinos with a Three-Dimensional Calculation
- 6. C.Waltham, Y.Tserkovnyak, R.Komar &C.Nally A 3-D Calculation of Atmospheric Neutrino Fluxes

#### C. OSCILLATIONS EXPERIMENTS AT ACCELERATORS

- 1. K.Eitel &M.Steidl Statistical Analysis of the LSND and KARMEN numubar->nuebar Searches
- 2. B.Choudhary Development, Construction and Performance of A Large Solid Scintillator Detector for the MINOS Experiment
- 3. A.T.Habig The MINOS Far Detector
- 4. W.Winter Neutrino Oscillation Tomography - or - What Could One Learn About the Earth's Interior from Neutrino Oscillations in Matter?
- 5. N.Okamura Measuring the CP-Violating Phase by a Long Baseline Neutrino Experiment with Hyper-Kamiokande
- V.Ammosov, V.Garkusha, A.Ivanilov, V.Kabachenko, E.Melnikov, F.Novoskoltsev, A.Soldatov & A.Zaitsev
  Prospects to Measure Neutrino Oscillation Pattern with Very Large Area Underground Detector at Very Long Baselines

#### D. THEORY OF NEUTRINO MASSES AND OSCILLATIONS, GLOBAL INTERPRETATI

- 1. T.Ohlsson T-Violating Effects in Neutrino Oscillations with Three Flavors in Matter
- 2. T.Schwetz Status of Four Neutrino Mass Schemes: A Global and Unified Approach to Current Neutrino Oscillation Data
- 3. D.Suematsu Flavor Mixing in Quarks and Leptons
- 4. M.Frigerio

The Structure of Neutrino Mass Matrix

#### 5. G.Seidl Bilarge Mixing of Leptons Using Abelian Flavor Symmetries

6. S.Antusch, J.Kersten &M.Ratz Renormalization Group Evolution of Neutrino Mass Parameters

#### E. BETA DECAY ENDPOINT EXPERIMENTS

- 1. B.Müller &T.Thümmler Particle Storage in MAC-E-Filters
- 2. L.Bornschein &C.Kraus Latest Results of the Mainz Neutrino Mass Experiment
- 3. B.Flatt Design of KATRIN Pre Spectrometer
- 4. M.Sisti High Statistics Measurement of 187-Re Beta Spectrum for Direct Neutrino Mass Determination

#### F. DOUBLE BETA DECAY

- 1. S.Elliott for the Majorana Collaboration The Majorana 76Ge Double Beta Decay Project
- 2. K.Zuber, C.Goessling, H.Kiel, D.Muenstermann & Y.Ramachers COBRA - A New Approach to Double Beta Decay Using CdTe
- 3. W.Rodejohann Measuring Leptonic CP Violation in Neutrinoless Double Beta Decay
- 4. H.Nunokawa, W.J.C.Teves &R.Zukanovich Funchal Constraining the Absolute Neutrino Mass Scale and Majorana Phases by Future Beta Decay Experiments
- 5. S.Pascoli Neutrinoless Double Beta Decay, Neutrino Masses and CP-Violation
- 6. Y.Zdesenko The Future of Double Beta Decay Research

G. NEUTRINO INTERACTIONS, NON-OSCILLATION NEUTRINO PHYSICS

- 1. M.Passera Elastic Scattering of Neutrinos off Polarized Electrons
- 2. I.Picek

**On Selected Radiative Corrections to the Nondiagonal Neutrino-Electron Interaction** 

- 3. A.Derbin &O.Smirnov for BOREXINO collaboration Search for Electron Decay Mode e ->nu + gamma with Prototype of Borexino Detector
- 4. A.Derbin &O.Smirnov for BOREXINO collaboration Study of the Neutrino Electromagnetic Properties with Prototype of Borexino Detector
- A.Derbin, O.Smirnov &V.Tretyak for BOREXINO collaboration Search for Invisible Nucleon Decay Modes (N ->3nu, NN ->2nu) with Prototype of the Borexino Detector
- 6. M.Trinczek Novel Search for Heavy Neutrino Mixing from the Positron Decay of K-38m Confined in an Atom Trap

#### H. NEUTRINOS IN ASTROPHYSICS AND COSMOLOGY

- 1. S.Pastor Neutrino Oscillations In Dense Neutrino Media
- 2. D.Grasso Cosmic Magnetic Fields and Gravitational Waves from Neutrino Isocurvature Fluctuations
- 3. R.Tomas SN 1987A and the Status of Oscillation Solutions to the Solar Neutrino Problem
- 4. C.Lunardini Supernova Neutrinos and the Reconstruction of the Neutrino Oscillation Parameters
- 5. D.Montanino Analytical Treatment of Neutrino Oscillations in Supernovae
- 6. M.Keil Monte Carlo Study of Supernova Neutrino Spectra Formation
- 7. M.Selvi Neutrino Oscillation Studies with LVD
- 8. A.S.Murphy OMNIS, the Observatory for Multiflavour NeutrInos from Supernovae
- 9. S.E.Yuralevich New Possible Source of Huge Neutrino Bursts

#### I. HIGH-ENERGY NEUTRINO TELESCOPES AND ASTROPHYSICAL SOURCES

1. S.Hundertmark Search for UHE Neutrinos with AMANDA

- 2. M.Kowalski Search for Neutrino-Induced Cascades with the AMANDA II Detector
- 3. D.McKay Performance, Simulation and Flux Limits from the RICE Detector
- 4. S.N.Dobrovolsky

Long-Wavelength Transition Radiation Application for High-Energy Neutrino Detection

- 5. Huang Ming-Huey Expected Performance of a Neutrino Telescope for Seeing AGN/GC Behind a Mountain
- 6. C.Hettlage Neutrino Flux Bounds, Event Rates, and their Implications for an Inner Earth Tomography
- 7. D.Guetta Neutrino Flux Predictions for Known Galactic Microquasars
- 8. D.Semikoz Upper Limits on Ultra-High Energy Neutrino Fluxes from Cosmic and Gamma-Ray Data
- 9. D.Semikoz &A.Neronov Large Neutrino Fluxes from Blasars?

### J. DARK MATTER, AXIONS

- 1. C.Cozzini CRESST Dark Matter Search: Results of Phase I
- 2. M.L.Sarsa Sarsa Cryogenic Detection Techniques at the Canfranc Underground Laboratory: The ROSEBUD Experiment
- 3. J.Morales Improved Constraints on WIMPs from the International Germanium Experiment IGEX
- 4. J.Morales Searching for Annual Modulation in the WIMP Signal: The ANAIS Experiment at Canfranc
- 5. V.A.Kudryavtsev for the Boulby Dark Matter Collaboration Dark Matter Experiments at Boulby Mine
- 6. E.Torrente Relic Neutralino Density in Scenarios with Intermediate Unification Scale

- 7. J.-F.Glicenstein EROS2 Results on Baryonic Dark Matter
- 8. A.Derbin &V.Muratova Search for the Invisible Axion Emitted in the Nuclear Magnetic Transitions

## Transparencies

Copies of transparencies of all talks will become available during the meeting on the conference web site.

## **Proceedings**

The proceedings of Neutrino 2002 will be published as a separate volume of Nuclear Physics B (Proceedings Supplement). A free copy of the proceedings is included in the registration fee for every registered participant.

### Submission:

The deadline for submission of contributions to the proceedings is **August 31, 2002**. This **deadline must be strictly observed**. All contributions must be sent to the Conference Secretariat simultaneously in the following two ways:

- in electronic form, as a LaTeX file, using Elsevier B.V. style files
- as a camera ready printout or equivalently as a Postscript file

## **Conference Facilities**

### **Opening Hours of the Conference Registration Desk:**

Friday, May 24 (arrival day)	15:00-21:00
Saturday , May 25	08:00-18:00
Sunday, May 26	08:30-18:00
Monday, May 27	08:30-18:00
Tuesday, May 28 (excursion day)	- closed -
Wednesday, May 29	08:30-18:00
Thursday, May 30	08:30-18:00

### **Lecture Hall:**

The talks and some of the social events will take place in or close to the **Werner von Siemens Auditorium (Audimax)** on the central campus of the **Technische Universität München (TUM)**,

located in the **central part of Munich**. Information about Munich public transport and on how to reach the conference location with public transport can be found under the menu item "**Munich Information**" on the conference web site.

### **Information for Speakers:**

**Overhead projectors and video projectors** (1024 x 768 pixels resolution; standard VGA interface) will be the standard media for presentations. Testing of notebooks for power point presentations will be available in the breaks. Note that speakers are expected to have **backup slides** which must be used in case the power point presentation cannot start within one minute after connecting the notebook.

Modest slide copying and printing facilities will be available for speakers. Please contact the conference secretariat if other special equipment is needed.

All talks will be included as quick as possible in the **collection of presentations on the conference web pages**. Therefore all speakers must **hand in their transparencies immediately after their talks**. This can be either slides for scanning or files in one of the usual electronic formats (power point, pdf, postscript, gif, jpeg).

### **Computing Facilities:**

Note that there will be only a limited number of PCs with the usual software to communicate via the internet. We will provide in addition network interfaces which will allow participants to connect with their own notebooks to the internet.

### **Restaurants:**

There are numerous good quality and reasonably priced restaurants as well as student cafeterias in the vicinity of the conference location. You may download and print a **list and a plan of restaurants and cafes ( postscript , pdf )** close to the conference site. A list and a plan will be included in the conference package.

## **Social Program**

### **Receptions and Conference Dinner:**

The conference fee includes participation in the following social evening events:

#### May 24: Registration Welcome

The conference registration desk in front of the Werner von Siemens Auditorium will open on Friday, May 24 at 15:00 until 21:00 for registration. Snacks and refreshment drinks will be offered starting at 18:00.

#### May 25: Alte Pinakothek & Welcome Reception

There will be guided tours of the Alte Pinakothek (one of the oldest public galleries with world famous paintings) at 18:30, followed by a welcome reception in the Immatriculation Hall (both very close to the Werner von Siemens Auditorium). A buffet dinner will be served starting at 20:00.

#### May 27: Reception by the State of Bavaria

In the evening of Monday, May 27, starting at 20:00, all participants and registered accompanying persons are invited by the Bavarian State Government to a reception including a dinner.

#### May 29: Conference Dinner

On Wednesday, May 29, we will have at 20:00 the conference dinner at the world famous "Hofbräuhaus".

#### **Public Lecture:**

**Tuesday May 28:** Public evening lecture (in German) by G.Raffelt on "Neutrinos - Neues von den Geisterteilchen". For further details see menu item **"Public & Press"** on the conference web site.

### **Excursions:**

Participants and accompanying persons are invited to sign up for the conference excursions (the minimum number of participants for each tour is 30; guides will speak English and German; Japanese speaking tour guides are available if there is sufficient demand). Further information about the attractions and some pictures can be found in the menu item **"Tourist Guide"** on the conference web site. The following excursions are offered:

#### **A) Conference Excursion**

The all day conference excursion will take place on Tuesday, May 28. Transportation will be by air-conditioned buses.

Code	Tour
E1:	Neuschwanstein and Linderhof (87 EUR) Visit two very famous castles of King Ludwig II and enjoy the wonderful landscape of the Bavarian Alps: To Linderhof via the town of Oberammergau. Tour of the castle Linderhof. Lunch in the village of Hohenschwangau. Tour of the castle Neuschwanstein. The price includes bus transfer, guide, entrance fees and lunch.
E2:	Linderhof and Oberammergau (77 EUR) This trip combines a visit to a romantic castle of King Ludwig II with a tour of Oberammergau, a town most famous for its passion plays. Tour of the castle Linderhof. Lunch in Oberammergau; tour of the festival theater. Visit of the monastery in the village of Ettal. The price includes bus transfer, guide, entrance fees and lunch.
E3:	<b>Chiemsee (84 EUR)</b> Visit the lake of Chiemsee and its two largest islands, Herreninsel and Fraueninsel. Boat trip from the village of Prien to Herreninsel and tour of the castle Herrenchiemsee which was built by King Ludwig II in the style of King Louis XIV's castle at Versailles. Boat trip continues to Fraueninsel for lunch and a short walking tour of the island, thereafter back to Prien. The price includes bus and boat transfer, guide, entrance fees and lunch.
E4:	<b>Rothenburg ob der Tauber (69 EUR)</b> Trip to the picturesque town of Rothenburg ob der Tauber, most famous for its medieval panorama. The trip follows the Romantic Road via the town of Noerdlingen (with a short walking tour of its medieval center) to the town of Rothenburg. Lunch in Rothenburg; guided tour of the town. The price includes bus transfer, guide and lunch.

## **B)** Guided Excursions (half day) for Accompanying Persons:

Code	Tour
G1:	<b>Saturday, May 25: Munich and Nymphenburg Castle (26 EUR)</b> City tour of Munich by bus and tour of the famous castle of Nymphenburg in former times used as a summer residence by Bavarian rulers. The tour is guided and the price includes all entrance fees.
G2:	<b>Sunday, May 26: Munich and Bavaria Film Studios (33 EUR)</b> City tour of Munich by bus and tour of the Bavaria Filmstudios: Studios where stunning scenes for motion pictures are recorded. The tour is guided and the price includes all entrance fees.
G3:	Monday, May 27: Historic Munich and Residenz (49 EUR) Tour through the old parts of Munich by foot, including a spectacular tour of the Residenz. The tour is guided and the price includes all entrance fees.
G4:	Wednesday, May 29: Munich and Olympic Grounds (28 EUR) City tour of Munich by bus and tour of the Olympic area where the XX. Olympic Games took place in 1972. The trip includes a visit to the top of the Olympic tower and a tour of the stadium. The tour is guided and the price includes all entrance fees.

# **Registration and Fees**

### **Conference Fees:**

Type of Participant	Conference Fee in EUR
Regular Participant (registered before Mar. 1, 2002)	350
Regular Participant (registered after Mar. 1, 2002)	400
Accompanying Person	125

The conference fee will allow regular participants to attend all lectures and to participate in all social evening events (receptions, conference dinner). A free copy of the proceedings is also included in this fee. The fee for accompanying persons includes participation at all receptions, the conference dinner and a conference bag with useful information.

### **Conference Fee Payment:**

Upon **online registration** we ask participants to pay the conference fee (**including any bank charges**) by one of the following means, **preferentially in the given order**:

#### 1) Money transfer by bank order

In this case, the conference fee(s) should be sent to the following bank account:

Account owner:	Max-Planck-Institut fuer Physik Postfach 401212, 80712 Muenchen, Germany
Bank:	Deutsche Bank Muenchen
BLZ (bank code): Account No.:	700 700 10
Account No.:	020 201 000
Note to Recipient:	Neutrino 2002 + your name + participant number

#### 2) Credit card (Master Card or Visa)

#### 3) Cheque

The conference fee may also be paid by **internationally accepted cheques**. A processing **fee of 10 EUR** has to be added to the registration fee(s) and the cheque should be mailed to:

Neutrino 2002 Secretariat Mrs. Sybille Rodriguez Max-Planck-Institut für Physik Föhringer Ring 6 D-80805 München Germany

Please make sure that **your full name and your participant number** is written on the cheque.

Note that cash payment of the conference fee at the registration desk upon arrival will **only be possible in very exceptional cases** if all of the above methods do not work.

#### **Accommodation and Excursions:**

Accommodation and excursions as described under the menu items "Accommodation" and "Social Program" on the conference web site can also be booked with the online registration. These bookings are handled by the official travel agency of Neutrino 2002, Lenz Incentive Reisen (LIR), which will confirm your bookings within a few days by email or by fax.

A **deposit** equivalent to the hotel costs of two nights is due after your booking is confirmed by LIR. The final payment is due four weeks before the conference. Note that **cancellation fees** are due if the hotel reservation is canceled later than a certain period (varying from 5 - 17 weeks, depending on the hotel) before the conference.

LIR accepts the following means of payment, preferentially in the given order:

#### 1) Money transfer by bank order to the following account:

	Lenz Incentive Reisen
	Liegnitzer Str. 7, 82194 Groebenzell, Germany
Bank:	Kreis- und Stadtsparkasse Fuerstenfeldbruck
BLZ (bank code):	70053070
Account No.:	1224518
Note to Recipient:	Neutrino 2002 + your name + participant number

If you choose this option upon registration, then you should wait for the email (or fax) from LIR confirming your bookings before you make any payments. LIR will confirm your bookings within a few days and the payment details will be repeated in this email.

#### 2) Credit card (Master Cardor Visa)

In this case your credit card will be charged with the deposit after confirmation. The remaining costs will be charged later.

Note that cash payment of booked excursions at the registration desk will only be accepted in **exceptional cases**.

# Contact

## **Conference Secretariat:**

For general questions concerning Neutrino 2002 and participation please contact:

Mrs. Alexandra Füldner Mrs. Sybille Rodriguez	Email: neutrino2002@ph.tum.de
	Tel.: +49 89 289 14402 Fax: +49 89 289 12680

### **Scientific Arrangements and Press:**

Questions concerning scientific arrangements at Neutrino 2002 should be sent to:

Michael Altmann	Email: neutrinosci@mppmu.mpg.de
NEUTRINO 2002 Scientific Secretary	Fax: +49 89 32354 305

## **Questions Concerning the Web-Site and Online Registration:**

To contact the webmaster or to report problems with the online registration send mail to:

NEUTRINO 2002 Web-Team	Email: tadmin@ph.tum.de
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## **Hotel Booking: Questions and Special Requests**

The online registration (see menu item **''Registration and Fees''** on the conference web site) consists of three sections:

- 1. participant registration
- 2. hotel reservation
- 3. excursion booking

Please use the online registration to make your hotel requests and excursion bookings. Hotel requests (**only hotels**) are forwarded to LIR, the official travel agency of Neutrino 2002. If you need to get in touch with LIR before your booking is confirmed you can contact them directly:

Lenz Incentive Reisen (LIR) Email: incentive@reiseservice-lenz.de

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# **Further Information**

The conference website at http://neutrino2002.ph.tum.de/ will be updated as soon as information becomes available.