



Erlangen, April 16, 2019

## Bulletin 1

### School for Astroparticle Physics

October 2–10, 2019, Obertrubach-Bärnfels, Germany

#### 1. General Information

The 16<sup>th</sup> edition of the annual *School for Astroparticle Physics* will be held in Obertrubach-Bärnfels in the countryside near Erlangen from 2<sup>nd</sup> to 10<sup>th</sup> October 2019. The School primarily addresses graduate and PhD students from all fields of experimental and theoretical astroparticle physics. Further information on the 2019 School can be found at

<https://www.astroteilchenschule.nat.fau.de>



The *School for Astroparticle Physics* offers education in a wide range of selected topics from astrophysics, particle physics and cosmology, as well as in-depth coverage of topical developments in astroparticle physics. A further goal of the School is to stimulate contacts between participants and lecturers and to strengthen long-term cooperation and networking in the community of astroparticle physicists. The School combines education, discussion and contributions by the participants. The programme includes: (i) Lectures of 3x90 minutes each about central topics of astroparticle physics; (ii) Presentations (90 minutes) about special topics of astroparticle physics; (iii) Complementary evening lectures about topics related (or less related) to astroparticle physics; (iv) Talks of the participants, in which they present their own work; (v) Exercises and discussions about the lectures. Furthermore, the extended lunch breaks, the evenings and the free Sunday allow for joint activities and stimulation of contacts between participants and lecturers.

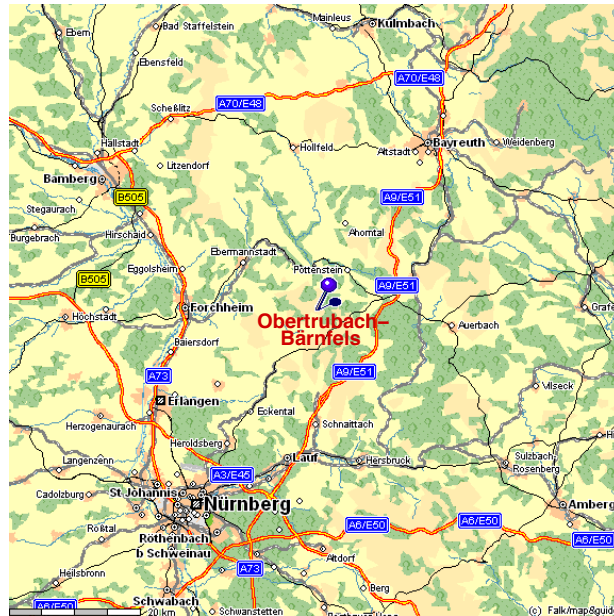
The *School for Astroparticle Physics* is supported by the *University of Erlangen-Nürnberg* (FAU) through the *Erlangen Centre for Astroparticle Physics* (ECAP) and by the *Federal Ministry of Education and Research* (BMBF).

#### 2. Location and Accommodation

*Gasthof Drei Linden* offers good-value accommodation, full-board meals, the required infrastructure as well as a very comfortable atmosphere. The participation fee of 280 € includes the accommodation in twin rooms with bathrooms as well as breakfast buffet, mid-morning coffee, lunch, afternoon coffee with cake, and dinner. Beverages are not included and have to be paid extra. The location of Obertrubach-Bärnfels in the greater area of Nürnberg/Erlangen/Bamberg/Bayreuth is indicated in the following map. Detailed information about arrival and traffic links will be provided in the second bulletin.

#### 3. Programme and Schedule

**Programme committee:** Gisela Anton (University Erlangen-Nürnberg, ECAP)  
Johannes Blümer (KIT Karlsruhe)  
Christopher van Eldik (University Erlangen-Nürnberg, ECAP)  
Franz von Feilitzsch (Technical University München)  
Stefan Funk (University Erlangen-Nürnberg, ECAP)  
Werner Hofmann (MPI Heidelberg)  
Uli Katz (University Erlangen-Nürnberg, ECAP)  
Karl Mannheim (University Würzburg)  
Julian Rautenberg (University Wuppertal)  
Jörn Wilms (University Erlangen-Nürnberg, ECAP)



<https://goo.gl/maps/489FoGD1FB32>

### Programme:

Lectures (3 × 90 minutes):

Karl-Heinz Kampert	(U. Wuppertal)	Cosmic Rays
Imre Bartos	(U. Florida)	Astrophysics with Gravitational Wave Observations
Jacco Vink	(U. Amsterdam)	Particle Acceleration and Magnetic Fields in Cosmic Shocks
Bela Majorovits	(MPP Munich)	Light Dark Matter

Talks (90 minutes):

Thomas Kuhr	(U. Munich)	Deep Learning
Torsten Enßlin	(MPA Munich)	Information Field Theory
Stefan Hild	(U. Glasgow)	Future Gravitational Wave Detectors
Sera Markoff	(U. Amsterdam)	Physics of the Event Horizon Telescope

## 4. Local Organisation and Registration

**Local organising committee:** Gisela Anton, Daniela Dorner, Thomas Eberl, Sebastian Fiedlschuster, Stefan Funk, Jürgen Hößl, Ira Jung, Uli Katz, Robert Lahmann, Julian Rautenberg, Christopher van Eldik, Jörn Wilms, Andreas Zmija

### Contact:

Email: [ecap-at-schule@fau.de](mailto:ecap-at-schule@fau.de)

## Registration:

Registration for the School is via the website

<https://www.astroteilchenschule.nat.fau.de>



Please consider that the number of participants is limited to about 40.

1. Registration is possible until 1<sup>st</sup> September 2019, 12 pm. If the number of registrants exceeds 40 at this time, registration will be closed and the participants will be selected (see point 2). If less than 40 people are registered at the deadline, registration will be extended.
2. If there are more than 40 registrants, a selection will be made by the local organisation committee under individual consideration of the applications and in consultation with the registrants. Points to be taken into account are, amongst others, the registration date, the contingents of the delegating institutions as well as the possibility of the registrant to participate in the following year. Those registered until 1<sup>st</sup> September 2019, will be informed until 8<sup>th</sup> September 2019 about their admission.
3. Registrants from outside Europe should contact the organizers ([ecap-at-schule@fau.de](mailto:ecap-at-schule@fau.de)) as early as possible. In order to support you with your visa application, please have a letter of recommendation sent from your supervisor. This letter should contain a confirmation that your travel expenses and the participation fee will be covered by your home institution. We will then send you a letter of invitation which you will need for the visa application.

Each participant is expected to present her/his current research work in a talk of 15 minutes length. Title and abstract of this talk are mandatory parts of the registration and have to be submitted until 1<sup>st</sup> September 2019. They may be provided after the initial registration via the registration website. Requests concerning twin-room assignment, vegetarian or vegan food as well as suggestions can be placed in the field *remarks* during the registration.

## Participation fee:

The fee amounts to 280€ per participant. It includes the accommodation in twin rooms with bathrooms as well as breakfast buffet, mid-morning coffee, lunch, afternoon coffee with cake, and dinner. By 8<sup>th</sup> September 2019 the latest, each participant will receive a confirmation email including the instructions for the bank transfer. In the case of registration after 8<sup>th</sup> September 2019, this email will be sent immediately after the registration.