# Third Circular

# International Workshop "Probing Fundamental Symmetries and Interactions with UCN"

# Scientific program and practical information

Location and date: Mainz, Germany, April 11th-15th, 2016

Venue: Waldthausen castle, Am Wald 1, 55257 Budenheim near Mainz



Webpage: <a href="https://indico.mitp.uni-mainz.de/event/59/">https://indico.mitp.uni-mainz.de/event/59/</a>

Contact: <u>ucnworkshop@uni-mainz.de</u>

# Dear Colleague,

The International Workshop "Probing Fundamental Symmetries and Interactions with UCN" will be held at Waldthausen castle near Mainz, Germany, April 11<sup>th</sup>-15<sup>th</sup>, 2016. In the following you find practical information on the workshop, arrival proceedings and the scientific program.

# Scope of the Workshop

The aim of this workshop is to bring together leading international experts from both experiment and theory in the field of UCN physics to discuss present and future experiments with UCN as well as progress in UCN sources and instrumentation.

The list of topics of our workshop comprises the full range of fundamental physics searches with UCN and also related fields of fundamental physics with cold neutrons. The workshop includes both invited and contributed talks.

#### Scientific program

The workshop program features a rich and versatile list of topics. Here is a brief overview of the sessions:

#### Monday

• CP violation, baryogenesis (n-EDM search)

• Related instrumentation/simulation

#### **Tuesday**

• Cosmological constrains, BBN, CKM unitarity (n-lifetime)

• Related instrumentation/simulation

#### Wednesday

• Baryon number violation (n-nbar oscillations)

• 1/r<sup>2</sup> gravitational law, weak equivalence principle, extra dimensions,

(n-gravitation)

Neutron electro-neutrality

(n-charge)

Mirror matter

(mirror-neutrons)

### Thursday

• Decay correlations (neutron β-decay)

• Comparison of low energy and high energy results (EFT, QCD calc.)

• UCN sources (Part I)

# Friday

• UCN sources (Part II)

For details of the program see

https://indico.mitp.uni-mainz.de/event/59/timetable/#20160411.

A list of speakers and participants will be available on the workshop page.

Please note that there may be still minor changes on the program schedule.

Therefore, we recommend to have a look on the final updated version, the week before the workshop.

#### Information for speakers

The preferred file format is pdf or Powerpoint (2013-version). Please have your talk copied to the presentation computer before your session. For the time and length of your talk please check the <u>program on the homepage of the workshop</u> (click on a session to display the talks or chose the pdf). It is planned to make the presentations available on the web after the workshop.

#### Practical information and registration desk

For travel information see the webpage <a href="https://indico.mitp.uni-mainz.de/event/59/page/2">https://indico.mitp.uni-mainz.de/event/59/page/2</a>. Please take note that road work is ongoing at the main station for a new tram line. We recommend to take the west exit "<a href="Hauptbahnhof West">Hauptbahnhof West</a>" to the bus stop of the same name and board the bus to Schloss Waldthausen (line 64, direction "<a href="Budenheim/Bahnhof">Budenheim/Bahnhof</a>"[not the busses marked yellow]). We will update the workshop web page with latest information on local transport just before the workshop. Bus tickets can be purchased at vending machines or directly from the bus driver (cash only).

Check-in at Schloss Waldthausen on Sunday, 10<sup>th</sup> April, is possible at any time. The registration desk will open on Sunday at 3 pm. It will be open on Monday for the complete day. During the remainder of the week it will be open in the morning. For early arrivals, there is a nearby restaurant, <u>restaurant and café Turm</u>. Also, at <u>Schloss</u> Waldthausen recreational sports facilities, sauna, etc. are available for the guests.

On Wednesday afternoon a visit to the TRIGA Mainz user facility and its UCN sources will take place. For those who do not wish to visit the TRIGA Mainz a guided tour of Mainz will be organized.

Please take note that there is no ATM (cash machine) at Schloss Waldthausen. However, there are several ATMs at Mainz main station.

# Contact information during the workshop

Workshop E-mail ucnworkshop@uni-mainz.de

Workshop telephone +49 (0)175 7250985

Taxi call +49 (0)6131 910910

## Important dates

Workshop	April 11 <sup>th</sup> -15 <sup>th</sup> , 2016
Start of registration at Schloss Waldthausen	April 10 <sup>th</sup> , 2016, 3 pm
Welcome reception	April 10 <sup>th</sup> , 2016, 6-9 pm
Workshop dinner	April 13 <sup>th</sup> , 2016, 7 pm

### International Advisory Committee

H. Abele, D. Dubbers, B. Filippone, K. Kirch, St. Paul, Y. Masuda, A. Saunders, A. Serebrov, H. Shimizu, M. Snow, A. Young

#### Local Organizing Committee

M. Beck, W. Heil, S. Karpuk, T. Reich, P. Sach-Muth (secretary), Y. Sobolev, E. Stuck-Kerth (secretary), N. Trautmann

Looking forward to welcome you in Mainz