

## *Second Circular*

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

#### *Call for registration & Call for abstract submission*

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

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



Webpage: <https://indico.mitp.uni-mainz.de/event/59/>

Contact: [ucnworkshop@uni-mainz.de](mailto:ucnworkshop@uni-mainz.de)

*Please, circulate this information among your co-workers and interested colleagues.*

*Dear Colleague,*

The registration and abstract submission for the International Workshop “Probing Fundamental Symmetries and Interactions with UCN” to be held at Waldthausen castle near Mainz, Germany, April 11<sup>th</sup>-15<sup>th</sup>, 2016, is now open.

#### *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 will include both invited and contributed talks.

### *Scientific presentations and abstracts*

Please submit your abstract by following the instructions on <https://indico.mitp.uni-mainz.de/event/59/call-for-abstracts/>. Oral and poster presentations will be selected from the submitted abstracts. Deadline for abstract submission is March 1<sup>st</sup>, 2016.

### *Registration and practical information*

Please register at <https://indico.mitp.uni-mainz.de/event/59/page/9> if you plan to attend the workshop. The registration fee is 200 Euro. It includes attendance to the workshop, welcome reception, coffee breaks, lunch and dinner during the workshop, the workshop dinner on Wednesday evening and a visit to the research reactor TRIGA Mainz on Wednesday afternoon. Accommodation is NOT included.

There is a block reservation for rooms at Waldthausen castle. For room reservations please fill in the form under <https://indico.mitp.uni-mainz.de/event/59/picture/14.pdf> and send it by e-mail to [andrea.rieger@sv-rlp.de](mailto:andrea.rieger@sv-rlp.de) or by fax to +49 (0) 6131 1457234.

Alternative hotels are listed as well at <https://indico.mitp.uni-mainz.de/event/59/page/3>. Waldthausen castle can be reached by bus line 64 from Mainz main station in about 20 min. Special inquiries and requests should be directed by email to the conference organizers ([ucnworkshop@uni-mainz.de](mailto:ucnworkshop@uni-mainz.de)). During the workshop a visit to the TRIGA Mainz user facility and its UCN sources will be possible.

### *Important dates*

Deadline for room reservation at Waldthausen castle	March 1 <sup>st</sup> , 2016
<b>Abstract submission deadline</b>	<b>March 1<sup>st</sup>, 2016</b>
<b>Deadline for workshop registration</b>	<b>March 1<sup>st</sup>, 2016</b>
Conference fee payment deadline	March 8 <sup>th</sup> , 2016
Welcome reception	April 10 <sup>th</sup> , 2016
Workshop dinner	April 13 <sup>th</sup> , 2016
Workshop	April 11 <sup>th</sup> -15 <sup>th</sup> , 2016

### *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

### *List of topics*

- $V_{ud}$ , unitarity of the CKM-matrix and BBN (n-lifetime)
- Decay correlations (neutron  $\beta$ -decay)
- CP/T violation, baryogenesis (n-EDM)
- Baryon number violation (n-nbar oscillations)
- $1/r^2$  gravitational law, weak equivalence principle, extra dimensions (n-gravitation)
- Neutron electro-neutrality (n-charge)
- Mirror matter, spin-dependent forces, axion (mirror-neutrons, DM-search)
- Comparison of low energy and high energy results (EFT, QCD calc. )
- Exotic couplings, symmetries, CPT and Lorentz-invariance
- UCN sources
- Instrumentation/simulation
- UCN applications (surface phenomena, etc. )

### *Invited Speakers*

H. Abele (TU Vienna, Austria), L. Broussard (LANL, USA),  
Z. Berezhiani (University of L'Aquila, Italy), D. Dubbers (Heidelberg University, Germany), M. Gonzales-Alonso (IPNL, France), K. Kirch (ETH Zürich and PSI, Switzerland), C.-Y. Liu (Indiana University, USA), B. Märkisch (TU Munich, Germany), M. Ramsey-Musolf (University of Massachusetts Amherst, USA), L. Salvati (INFN and University of Rome, Italy), A. Serebrov (PNPI, Russia), A. Young (NCSU, USA)

### *Local Organizing Committee*

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

*Looking forward to welcome you in Mainz*