Program

Sunday, July 8, 2018

17:00 – 21:00	Registration	
18:00	*BUFFET SUPPER and get-together*	

Monday, July 9, 2018

08:00	*BREAKFAST*	
08:50 – 09:00	Scientific organizers	**Welcome & Opening**
09:00 – 10:00	Ekkehard Peik	**Th-229 as an optical nuclear clock**
10:00 – 10:30	*COFFEE & TEA*	
10:30 – 11:15	Andreas Fleischmann	**Indirect determination of the Thorium-229 isomer energy by high resolution gamma spectroscopy**
11:15 – 12:00	Christian Schneider	**Direct search for the ^{229}Th nuclear isomeric transition with Th-doped crystals**
12:00 – 12:10	**Conference photo** (in the front of the lecture hall)	
12:15	*LUNCH (followed by coffee and/or tea)*	

Program

Monday, July 9, 2018

13:45 – 14:15	Thorsten Schumm	**Two attempts to measure the Thorium-229 isomer energy**
14:15 – 14:45	Akihiro Yoshimi	**Nuclear resonant scattering of ^{229}Th for observation of radiative isomeric transition**
14:45 – 15:15	Beata Zjawin	**Analysis of optical atomic clocks readouts aimed on searches for dark-matter signatures**
15:15 – 15:45	*COFFEE & TEA*	
15:45 – 16:15	Matthias Verlinde	**Study of $^{22\,m}$Th: Laser ionization and VUV spectroscopy**
16:15 – 16:45	Petr Borisyuk	**Excitation of ^{229}Th nuclei in laser plasma: the energy and half-life of the low-lying isomeric state**
16:45 – 17:15	Adriana Pálffy-Buß	**Nuclear and atomic structure calculations for the ^{229}Th isomeric state**
17:15 -18:45	**Poster session**	
19:00	*DINNER*	

Program

Tuesday, July 10, 2018

08:00	*BREAKFAST*	
09:00 – 10:00	Peter Thirolf	**The fog disperses: What do we know about the elusive ^{229}Th isomer ?**
10:00 – 10:30	*COFFEE & TEA*	
10:30 – 11:15	Benedict Seiferle	**Internal conversion electron spectroscopy of ^{229m}Th**
11:15 – 12:00	Christoph Heyl	**Power-scaling VUV/XUV frequency combs: Recent results and prospects**
12:15	*LUNCH (followed by coffee and/or tea)*	
13:45 – 14:15	Feodor Karpeshin	**Physics of laser-assisted nuclear processes as the base for creation of the nuclear clock**
14:15 – 14:45	Julian Berengut	**Atomic calculations in multivalent ions with applications to novel clocks**
14:45 – 15:15	Martin Henriksen	**Acetylene frequency reference**
15:15 – 15:45	*COFFEE & TEA*	
15:45	**Excursion**	
19:00	*HERAEUS DINNER* *(social event with cold & warm buffet and complimentary drinks)*	

Program

Wednesday, July 11, 2018

08:00	*BREAKFAST*	
09:00 – 10:00	Marianna Safronova	**Novel atomic clocks and the search for new physics**
10:00 – 10:30	*COFFEE & TEA*	
10:30 – 11:15	Andrew Ludlow	**High stability optical clock based on Ramsey-Borde interferometry in thermal calcium**
11:15 – 12:00	Atsushi Yamaguchi	**Laser cooling of cadmium towards an optical lattice clock**
12:15	*LUNCH (followed by coffee and/or tea)*	
13:45 – 14:15	Nils Huntemann	**$^{171}Yb^{+}$ single-ion optical clocks**
14:15 – 14:45	Stefan A. Schäffer	**Lasing on a forbidden transition in a thermal cloud of Strontium atoms**
14:45 – 15:15	Tanja Mehlstäubler	**Clocks based on complex Coulomb systems**
15:15 – 15:45	*COFFEE & TEA*	

Program

Wednesday, July 11, 2018

15:45 – 16:15	David Champion	**Pulsars as cosmic clocks**
16:15 – 16:45	Pacôme Delva	**A gravitational redshift test using eccentric Galileo satellites**
16:45 – 17:15	Jean Lautier Gaud	**Enabling the remote comparison of novel optical clock signals with state-of-the-art optical frequency standards**
17:15 -18:45	**Poster session / nuClock consortium meeting**	
19:00	*DINNER*	

Program

Thursday, July 12, 2018

08:00	*BREAKFAST*	
09:00 – 10:00	José R. Crespo López-Urrutia	**Electronic transitions in highly charged ions with possible applications to the electron-nucleus bridge mechanism**
10:00 – 10:30	*COFFEE & TEA*	
10:30 – 11:15	Viktor Flambaum	**Effects of dark matter, variation of the fundamental constants and violation of the fundamental symmetries in nuclear and atomic clocks**
11:15 – 12:00	Michal Zawada	**Dark matter searches within the intercontinental optical atomic clock network**
12:00 – 12:15	Scientific organizers	**Closing**
12:15	*LUNCH (followed by coffee and/or tea)*	

End of the seminar and departure

NO DINNER for participants leaving on Friday morning