

Second Circular ENSAR2 NUSPRASEN Workshop

Superheavy element research, target techniques and related topics

GSI, February 25th-27th, 2019 (integrated into NUSTAR Annual Meeting 2019)

We are pleased to send you the program for this workshop and invite you to participate!

The registration is open at <https://indico.gsi.de/event/7759/registration/register#/register>

The aim of this workshop is to provide an exchange platform for European scientists working in the field of SHE research, to present and discuss R&D work, to establish new collaborations and to network. It aims at further stimulating the cooperation among European laboratories. It is the opportunity to dwell on topics which are not usually treated in regular conferences or collaboration meetings. One of the major goals is to support young scientists. The Scientific Committee has identified the following three major topics of interest for this workshop:

- Update of ongoing activities in Europe: presentations by PhD students, postdocs and early career researchers
- Review all aspects of target developments for the next generation of experiments using high intensity beams and to explore synergies between target-related challenges for different research fields, their requirements and specific solutions.
- Overview of recent highlight results and achievements world-wide

With these pillars, the workshop will be able to raise new synergies between European laboratories and user groups that are active in SHE research. It will also give a close look at the activities and developments of the NUSTAR collaboration at GSI/FAIR which are beneficial for SHE research and vice versa.

The workshop is organised within the NUSPRASEN network of ENSAR2 and some limited financial support is available on request. More information on NUSPRASEN can be found at: <http://www.uni-giessen.de/fbz/fb07/fachgebiete/physik/einrichtungen/2pi/ag/ag-scheidenberger/NUSPRASEN>.

Location

The workshop will take place at GSI. Accommodation is available at the GSI guesthouse (see https://www.gsi.de/work/organisation/wissenschaftliche_gremien/user/user_services/gsi_lodging.htm for more information) and in the hotel list below. We recommend to book the GSI guesthouse as soon as possible, especially for those participants who receive financial support from the NUSPRASEN network.

Workshop fee

The workshop fee is 50€. Workshop participants are welcomed to participate in the NUSTAR Annual Meeting as well (which extends up to Friday, March 1st). For workshop participants no additional fee will be due for the NUSTAR Annual Meeting.

Financial Support

Please contact C. Scheidenberger (C.Scheidenberger@gsi.de) or R-D Herzberg (R.Herzberg@Liverpool.ac.uk) to apply for financial support (Travel, Accommodation, Workshop Fee). Please provide a short justification. This support is primarily aimed at early career researchers with limited travel budgets and who give oral presentations. Supported candidates are strongly encouraged to attend the entire NUSTAR Annual Meeting (up to and including Friday, March 1st).

Scientific Organising Committee

M. Block, HIM Mainz, U Mainz, GSI Darmstadt
 Ch. E. Düllmann, U Mainz, GSI Darmstadt, HIM Mainz
 R.-D. Herzberg, U Liverpool (Chair)
 W. Korten, IRFU Saclay
 B. Lommel, GSI Darmstadt
 C. Scheidenberger, JLU Giessen, GSI Darmstadt

time	Name	Institute	Title
Status 10 Dec. 2018			
DRAFT Programme for the NUSPRASEN SHE-Workshop at GSI			
Presentations by young researchers (Monday)			
13:30	Rodi HERZBERG	U-Liverpool	Welcome, purpose and goal of the meeting
13:40	Julien PIOT	GANIL	Spectroscopy and identification of rare isotopes using S3
14:00	Marine VANDEBROUCK	CEA	Production cross-sections of 243Es and 249Md: reaction mechanism towards the spectroscopy of SHN
14:20	Elisabeth RICKERT	U-Mainz	Towards ion mobility measurements of actinides
14:40	Ilkka POHJALAINEN	JYFL	Actinide beams by light ion induced fusion evaporation reactions for collinear laser spectroscopy
15:00	Ayona (Alena) KUZNETSOVA	FLNR Dubna	Spectroscopy of the isotopes of transfermium elements at FLNR-JINR
15:20	Anton ROTH	Lund	Decay Spectroscopy: From radium to flerovium with Lundium
15:40	Coffee break		
16:10	Michael GÖTZ	U-Mainz	Highly efficient synthesis of carbonyl complexes of short-lived transition-elements
16:30	Jacob HEERY	U-Liverpool	Developing Techniques for Lifetime Measurements in the Heaviest Elements
16:50	Thomas GOIGOUX	CEA	Simulations of the future SEASON detector for spectroscopy at the Low Energy Branch of S3 and results from 249Md experiment at JYFL
17:10	Andrey ISAEV	FLNR Dubna	Investigation of the spontaneous fission properties of neutron-deficient nobelium isotopes
17:30	Rafael FERRER	KU-Leuven	Supersonic jets for laser spectroscopy of heavy elements at the S3-LEB
17:50	Bastian SCHÜTRUMPF	TU-Darmstadt	Density and shell-effects in superheavy nuclei
18:10	Buffet dinner		
Target techniques and developments (Tuesday morning)			
8:30	Bettina LOMMEL	GSI	Overview of target preparation techniques at the GSI target laboratory
8:50	Goedele SIBBENS	GEL	Target preparation and characterization at JRC-Geel
9:10	Emilio MAUGERI	PSI	Targetry at PSI
9:30	Raphael HAAS	U-Mainz	Target performance under beam influence: comparison of different production methods and different incident projectiles - status and perspectives
9:50	Juha UUSITALO	JYFL	Nuclear Spectroscopy Group activities around MARA and RITU separators at JYFLACCLAB
10:10	Christelle STODEL	GANIL	Target developments for experiments at S3
10:30	Coffee break		
10:50	Elizaveta MELNIK	FLNR Dubna	Intermetallic actinides targets for intense heavy ion-beam irradiations
11:10	Dennis RENISCH	U-Mainz	Developments on a Drop-on-Demand System for Actinide-Targets
11:30	Chunli YANG	IMP-Lanzhou	Uranium targets prepared by Pulse Molecular Plating and target characterization
11:50	Andrea MITU	ELI-NP	Consolidating Target Manufacturing Methods for Nuclear Physics Experiments at Accelerators
12:10	Yukiko KOMORI	RIKEN	Activities related to SHE target production at RIKEN and aqueous chemistry of SHEs
12:30	Birgit KINDLER	GSI	Characterization methods at the target laboratory of GSI
12:50	Lunch break		
Tour to GSI facilities and Target Laboratory (Tuesday afternoon)			
14:30	NN		Tour to GSI accelerators and experiments, including FAIR construction site
16:00	Coffee break		
16:30	NN		Tour to GSI Target Laboratory
Plenary Session NUSTAR (Wednesday afternoon)			
14:30	Andrey POPEKO	FLNR Dubna	Status of the factory of superheavy elements at FLNR
14:55	Hironitsu HABA	RIKEN	Present Status and Perspectives of SHE Researches at RIKEN
15:20	Francesca GIACOPPO	GSI	Direct mass measurements of ground states and isomers in the heaviest elements at SHIPTRAP
15:45	Antonio DINITTO	U-Naples	Study of non-fusion products in the 50Ti+249Cf
16:10	Coffee break		
16:40	Barbara SULIGNANO	CEA	Recent results on spectroscopy of 250No and future experimental campaign on super heavy elements at S3'
17:05	Jacklyn GATES	LBNL	Recent results with FIONA
17:30	NN		contributed talk #1
17:50	NN		contributed talk #2
18:10	End of NUSPRASEN workshop on SHE		

Hotels in the Vicinity of GSI - Arheilgen and Egelsbach Update 22.01.2019

Hotel	Address	Room Rates	Time to get to GSI
GSI Guest house	Planckstr. 1 64291 Darmstadt-Wixhausen ☎ 06159-712625 guest-office@gsi.de	single room ~ 34 €/night Rooms with private shower und telephone	<ul style="list-style-type: none"> • Shopping area WX: 25 min, • bus stop to DA 15 min, • train station WX: 30 min, GSI: next door
Hotel KM	Frankfurter Landstr. 152 64291 Darmstadt-Arheilgen ☎ 06151-371051 Fax: 06151-375207 hotel-km@web.de	fully booked	<ul style="list-style-type: none"> • By tram 7/8 (stop Löwenplatz, across from the hotel) to stop Dreieichweg. Change to bus "G" ~ 10 min • By bus WX or 662 (stop Löwenplatz) to Wixhausen (stop Messeler-Park-Strasse) + walk, ~ 30 min • By car ~ 5-10 min
San Remo	Messeler Str. 7 64291 Darmstadt-Arheilgen ☎ 06151-374224 hotel.sanremo@ymail.com	single room: ~45 €/night, incl. breakfast 3 single rooms blocked until 15.02.2019 Booking code: GSI/NUSTAR Meeting	<ul style="list-style-type: none"> • By tram 7/8 (stop Löwenplatz) to stop Dreieichweg, Change to bus "G": ~ 10 min • By bus WX or 662 (stop Löwenplatz) to Wixhausen, (stop Messeler-Park-Strasse) + walk, ~ 30 min • By car ~ 5-10 min
Weißer Schwan	Frankfurter Landstr. 190 64291 Darmstadt-Arheilgen ☎ 06151-371702 Fax: 06151-377884 www.weisser-schwan.com info@weisser-schwan.com	single room: ~64 €/ night incl. breakfast 6 single rooms blocked until 16.02.2019 Booking code: GSI-Rate/NUSTAR Meeting	<ul style="list-style-type: none"> • By tram 7/8 (stop Messeler Strasse, across from the hotel) to stop Dreieichweg. Change to bus "G": ~ 10 min • By bus WX or 662 (stop Löwenplatz) to Wixhausen (stop Messeler-Park-Strasse) + walk, ~ 30 min • By car ~ 5-10 min
Arheilger Hof	Guericke Weg 16 64291 Darmstadt-Arheilgen ☎ +49 6151-93480 Fax: +49 6151 934851 contact: www.arheilger-hof.de info@arheilger-hof.de	single room: ~64 - 74 €/night incl. breakfast 3 single rooms blocked until 18.02.2019 Booking via email info@arheilger-hof.de Booking code: NUSTAR	<ul style="list-style-type: none"> • By tram 7/8 (stop Messeler Strasse) to stop Dreieichweg. Change to bus "G" ~ 20 min • Walk to train station Arheilgen. Train S3/S4 to Wixhausen station. Bus "G" to GSI; ~ 20 min • By car ~ 5-10 min
Landhotel Johanneshof	Im Geisbaum 22 63329 Egelsbach ☎+49 6103-406-0 www.landhotel-johanneshof.de info@landhotel-johanneshof.de	single room: ~81 €/ night incl. breakfast 5 single rooms blocked until 14.02.2019 Booking code: 209542 or "gsinustar250219"	<ul style="list-style-type: none"> • By bus 662 to stop Messeler-Park-Strasse + 15 min walk to GSI or take bus "G" at stop "Merianstraße" • By car ~ 10 min

Hotels in the Vicinity of GSI - Darmstadt Update 22.01.2019

Hotel	Address	Room Rates	Time to get to GSI
IBIS Budget	Kasinostrasse 4 64293 Darmstadt ☎ +49-6151-3973720 Fax: +49-6151-3973725 H3526@accor.com	single room: ~ 60,50€- 76,50€/night , incl. breakfast	<ul style="list-style-type: none"> • By car ~ 20 minutes
IBIS	Kasinostrasse 6 64293 Darmstadt ☎ +49-6151-39700 Fax: +49-6151-3970123 H3287@accor.com	single room: ~ 100€- 130€/night , incl. breakfast	<ul style="list-style-type: none"> • By car ~ 20 minutes
Hotel Best-Western	Grafenstrasse 31 64283 Darmstadt ☎ +49 6151 28100 Fax: +49 6151 293908 www.hotel-darmstadt.bestwestern.de info@hotel-darmstadt.bestwestern.de	single room: ~ 119 €/night incl. breakfast 8 single rooms blocked until 11.02.2019 Booking code: NUSTAR Annual Meeting	<ul style="list-style-type: none"> • By car ~ 25 minutes

