The Henryk Niewodniczański
Institute of Nuclear Physics
Polish Academy of Sciences
Poland, Kraków

NEUTRON AND ION DOSIMETRY SYMPOSIUM

NEUDOS13

PROGRAMME

NEUDOS-13
14-19 MAY 2017
Kraków, Poland
http://neudos2017.ifj.edu.pl

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Venue

The 2017 Neutron and Ion Dosimetry Symposium (NEUDOS-13) will be held in Kraków, a major European centre of culture, art, history, and education – and the main tourist attraction in Poland. Kraków, "the cradle of Polish royalty", is one of the oldest cities in central Europe. Because of its history and architecture, the Old City of Krakow became a UNESCO World Heritage Site in 1978. Over the years 1038 and 1596 Kraków was the capital of Poland, its Wawel Royal Castle being the seat of the kings of Poland and the Cathedral their place of burial. Nowadays Krakow is the capital city of the Malopolska region, and a leading Polish academic, commercial and industrial centre.

The Symposium will be held at the Kraków Congress Centre ICE (International Conferences and Entertainment), located at ul. Marii Konopnickiej 17, 30-302 Kraków.

www.icekrakow.pl

There are many entrances to the ICE building. The entrance to our Symposium area is over the western side of the building (from the Bulhaka Street) i.e. side opposite to that facing the Wisla river (see map on the cover of this brochure). After entering the ground hall, take the elevator to the 3rd floor.

Registration and Information Desk

All participants are requested to check in at the registration desk at ICE. You can register on Sunday, May 14, 2017, between 15:00 and 18:00 and during the Symposium from 8:00 a.m. The registration and information desk will be open during the entire Symposium.

The telephone number at which you can reach the Registration Desk during the conference is (+ 48) 691 113 647

We will also read your emails sent to neudos2017@ifj.edu.pl

For late payments of the conference fee at the conference desk only cash payments will be accepted, in Polish Zloty (PLN) or Euro (€).

Our staff at the registration desk will be happy to assist you in all your inquiries.

Badges/Tickets

All participants and accompanying persons will receive a personal badge upon registration.

Name badges have been color-coded as follows:

White	Participants
Violet	Technical exhibiters
Yellow	Conference organizers
Blue	Accompanying person

Please wear your badge at all times during all Symposium sessions and social events.

For the excursion to Wieliczka Salt Mine and to conference dinner an invitation is required. Invitations will be handed out during registration. For the excursion to the Cyclotron Centre Bronowice prior registration at the registration desk is also required.

Lunches and Coffee breaks

During the Conference lunches and coffee breaks will be held in the direct vicinity of the poster and exhibition hall.

Coffee and lunches are covered by the registration fee for participants and technical exhibitors.

Mobile phones

As a courtesy to speakers, we kindly request you to switch off your mobile phones before entering the sessions.

Internet facilities

There is a wireless internet connection available in the conference building. You will obtain the necessary login and password at the registration desk.

Transportation

Within the city you can use trams and city buses of the Kraków public transport system (MPK). **Your conference badge will allow you to use cost free all MPK public transportation** (trams and city buses) in Kraków between May 14 and May 19, 2017.

You can download from Google Play the application "**mobileMPK**" with timetables of Kraków public transport.

There are several bus and trams stops near the conference venue
Trams: 12, 18, 22, 42, 52, 62,
Buses: 101, 112, 124, 144, 162, 164, 173, 179, 184, 194, 229, 252, 424, 469, 503, 608, 610, 612, 662.

Bus 252 takes you directly from ICE to the Kraków airport.

Transportation from the Airport

1) **Train:** The Kraków Airport train station is located near the passenger terminal, at the rear of the multi-storey car park. Travelling by train is the fastest way to get to-/from the airport (ex. the journey to the city center takes about 17 minutes). Trains leave approximately every 30 minutes and operate 7 days a week. Tickets cost 9.00 PLN (which is approx. 2.1 €) and can be purchased in ticket machines at the passenger terminal, train station and at the train. Ticket machines accept payment by cash (PLN), debit or credit cards.

2) **Buses:** 208 and 252. 208 ends at the Kraków Train Main Station (Old City), 252 at the Kraków Congress Centre ICE, the NEUDOS-13 venue. Tickets cost 5.00 PLN and can be purchased from the ticket machine at the bus stop at the Kraków airport. If there is no ticket machine on the bus, tickets may be purchased from the driver using exact change.

3) **Taxi:** The trip to the city center costs between 69.00 PLN and 89.00 PLN, depending on the distance.

Liability

The Organizing Committee cannot accept any responsibility for personal accidents or loss or damage of private property of the participants. Participants are advised to make their own insurance arrangements they consider to be necessary.

Welcome Reception, Kraków Congress Centre ICE, Sunday, 14 May, 2017, 15:00 – 18:00

www.icekrakow.pl

The reception starts at 15:00 and lasts until 18:00. During the welcome reception, registration will be available.

The reception will be held at the Symposium area at the Kraków Congress Centre ICE, located at the ul. Marii Konopnickiej 17, 30-302 Kraków.

The entrance to our Symposium area is over the western side of the building (from the Bulhaka Street) i.e. side opposite to that facing the Wisla river (see map on the cover of this brochure). After entering the ground hall, take the elevator to the 3rd floor.

Excursion to the proton therapy at the Cyclotron Centre Bronowice, CCB, Tuesday, 16 May, 2017, 17:45 – 20:00

https://ccb.ifj.edu.pl

Buses will pick you up at 17:45 from the entrance to ICE and leave CCB at 20:00. The buses will stop at ICE, and at the hotel Wyspianski, ul. Westerplatte 15.
During the visit water and sandwiches will be available.
Please register for the CCB excursion at the registration desk.
The number of places for the excursion is limited.

Excursion to Wieliczka Salt Mine, Wednesday 17 May, 2017, 16:15 – 20:45

http://www.wieliczka-saltmine.com

Buses will pick you at 16:15 from the entrance to ICE and leave Wieliczka back to Kraków at 20:00.

The buses will stop at the Hotel Wyspianski, ul. Westerplatte 15 and at ICE.

1) Make sure to wear comfortable shoes. The journey begins with a descent underground, by foot, of 64 m, thus the visitors will have to walk down 380 stairs. The walk is approximately 3.5 kilometres and the whole trip lasts about 2 hours.

2) It is quite cool in the mine (between 14°C and 16°C). Make sure to take warmer clothing.
3) Toilet facilities are situated on the surface, next to the mine shaft and underground after approx. 40 and 90 minutes of the visit.
4) No luggage is permitted in the mine except personal hand-held baggage or small backpacks (maximum dimensions 35cm x 20cm x 20cm).

Conference Dinner, Stara Zajezdnia, Thursday, 18 May, 2017, 20:00 – 24:00

http://starazajezdniakrakow.pl/en/

The conference dinner will take place at the restaurant Stara Zajezdnia - Beer Hall, ul. Sw. Wawrzynca 12.

No special transportation is foreseen for participants - please use public transportation to get there: trams no. 3, 19, 24, 69, tram stop "Sw. Wawrzynca" and walk 300 meters (see map on the cover of this brochure).

Poster presentation

• *Poster area*

The poster sessions will take place in the near vicinity of the lecture hall and coffee area.

• *Poster mounting*

There will be two poster sessions, on Tuesday, May 16, 2017 14:00 – 15:30 and on Thursday, May 18, 14:00 – 15:30.

Posters should be mounted on Monday, May, 15 at the latest, and must be removed after the closing ceremony.

You will find the number of your poster on the panel. You will be provided with materials to attach your poster to the panel.

• *Poster viewing and presentation*

During the session at least one of the co-authors must be present at the poster.

Oral sessions

Instructions to speakers

Each speaker should bring the final version of his/her presentation (in Power Point or pdf format) on a USB stick or on a CD. You should check-in at the Computer Desk preferably the day before your presentation or no later than before the start of the morning session on the day of your presentations. Personnel will be there to assist you in transferring the files from the USB stick to the system computer. Presentation from a private laptop is not possible.

Prior to the start of the session, please identify yourself to the session chairs and familiarize yourself with the presentation tools. The time allocated for each oral presentation includes **2 minutes** of discussion time. Chairpersons will be requested to adhere to the times, so please do not risk running out of time and therefore missing the opportunity for questions and discussion.

08:00 – 09:00 **Registration**

09:00 – 09:30 **Opening session**

Welcome addresses

Paweł Olko *(Chairman of the NEUDOS-13)*
Filip Vanhavere (*EURADOS Vice Chairperson*)
Tadeusz Lesiak *(Scientific Director of the Institute of Nuclear Physics)*

(K-1)	Natalia Golnik (Keynote lecture)	Recombination chambers - do the old ideas remain useful?

09:30 – 10:50 **ORAL SESSION 1:**
Basic dosimetric quantities
Chair: ***Irena Gudowska and Maciej Budzanowski***

(I-1a)	Thomas Otto (Invited lecture)	The ICRU Proposal for New Operational Quantities for External Radiation *T. Otto, N.E. Hertel, D.T. Bartlett, R. Behrens, J.M. Bordy, G. Dietze, A. Endo, G. Gualdrini, M. Pelliccioni*
(I-1b)	François Quéinnec (Invited lecture)	Standards for Personal Neutron Dosimetry – a New Standard for Passive Dosimetry *F. Quéinnec, M.A. Chevallier*
(O1-1)	Nolan Hertel	Neutron Dosemeters and the Angular Dependence of Effective Dose *N.E. Hertel, K.G. Veinot, K. Eckerman*
(O1-2)	Richard Tanner	The Response of the Public Health England Neutron Personal Dosimetry Service in Terms of the New Proposed ICRU Personal Dose Equivalent *R. Tanner, L. Hager, J. Eakins*

10:50 - 11:20 *Coffee break*

11:20 – 13:00 **ORAL SESSION 2:**
Neutron dosimetry in research facilities
Chair: ***Renata Kopeć and Filip Vanhavere***

(I-2)	Xavier Ledoux (Invited lecture)	The Neutrons for Science Facility at Spiral-2 *X. Ledoux, M. Aïche, M. Avrigeanu, V. Avrigeanu, E. Balanzat, B. Ban-D'etat, G. Ban, E. Bauge, G. Bélier, P. Bém, C. Borcea, T. Caillaud, A. Chatillon, S. Czajkowski, P. Dessagne, D. Doré, U. Fischer, M.O. Frégeau, J. Grinyer, S. Guillous, F. Gunsing, C. Gustavsson, G. Henning, B. Jacquot, K. Jansson, B. Jurado, M. Kerveno, A. Klix, O. Landoas, F.R. Lecolley, J.L. Lecouey, M. Majerle, N. Marie, T. Materna, J. Mrázek, F. Negoita, J. Novák, S. Oberstedt, A. Oberstedt, S. Panebianco, L. Perrot, A.J.M. Plompen, S. Pomp, A.V. Prokofiev, J.M. Ramillon, F. Farget, D. Ridikas, B. Rossé, O. Serot, S.P. Simakov, E. Šimečková, M. Štefánik, J.C. Sublet, J. Taïeb, D. Tarrío, L. Tassan-Got, I. Thfoin, C. Varignon*
(O2-1)	Stephan Pomp	Light-Ion Production Measurements at the Upcoming Neutrons for Science Facility at Ganil *S. Pomp, C. Gustavsson, K. Jansson, A. Koning, F.R. Lecolley, A. Prokofiev, E. Andersson Sundén, D. Tarrío, U. Tippawan, Y. Watanabe*
(O2-2)	Marta Sabate - Gilarte	Neutron Flux Determination at the new n_TOF-EAR2 Facility at CERN *M. Sabaté-Gilarte, M. Barbagallo and the n_TOF Collaboration*
(O2-3)	Fabio Pozzi	CERN Irradiation Facilities *F. Pozzi, R.G. Alia, M. Brugger, P. Carbonez, S. Danzeca, F. Ravotti, M. Silari*

(O2-4)	Miroslav Zboril	Characterization of the PTB Thermal Neutron Calibration Facility with the Bonner Sphere Spectrometer NEMUS *M. Zbořil, M. Luszik-Bhadra, M. Reginatto, A. Zimbal*
(O2-5)	Jussi Huikari	Neutron Field Characteristics of Calibration Facilities of Radiation Metrology Laboratory (STUK): Special Features of Hp(10) *J. Huikari, T. Siiskonen, A. Kosunen, P. Pousi*
(O2-6)	Eike Hohmann	Shielding Verification for SwissFEL – the New Large Research Facility at PSI *E. Hohmann, C. Strabel, A. Fuchs, R. Galeev, E. Musto, M. Tisi, U. Strauch, E.G. Yukihara, S. Mayer*

13:00 - 14:00 *Lunch*

14:00 – 15:40 **ORAL SESSION 3:**
Neutron dosimetry in fusion facilities
Chair: ***Izabela Milcewicz-Mika and Gediminas Stankunas***

(I-3)	Paola Batistoni (Invited lecture)	Neutron Measurements in Fusion Reactors *P. Batistoni, S. Popovichev, S. Conroy, I. Lengar, L. Snoj and JET Contributors*
(O3-1)	Rosaria Villari	Active and Passive Dosimetry at JET Fusion Facility *R. Villari, P. Batistoni, U. Fischer, N. Fonnesu, Z. Ghani, A. Klix, M. Kłosowski, S. Loreti, J. Naish, B. Obryk, L. Packer, M. Pillon, S. Popovichev, I.E. Stamatelatos, T. Vasilopoulou, P. De Felice, M. Pimpinella, L. Quintieri, A. Colangeli and JET Contributors*

(O3-2)	Lee Packer	Dosimetry Foil Measurements of the JET Nuclear Environment for Irradiation Measurements of ITER Materials *L.W. Packer, P. Batistoni, B. Colling, K. Drozdowicz, Z. Ghani, M.R. Gilbert, S. Jednoróg, E. Łaszyńska, D. Leichtle, J.W. Mietelski, M. Pillon, S. Popovichev, I.E. Stamatelatos, T. Vasilopoulou, A. Wójcik-Gargula and JET Contributors*
(O3-3)	Ion Evangelos Stama-telatos	Dosimetry Experiments at JET to Benchmark Neutron Streaming Simulations *I.E. Stamatelatos, T. Vasilopoulou, P. Batistoni, J. Naish, B. Obryk, M. Kłosowski, M. Pillon, S. Popovichev, R. Villari and JET Contributors*
(O3-4)	Alberto Milocco	Neutron Radiation Damage in CCD Cameras at JET *A. Milocco, S. Conroy, S. Popovichev, A. Huber*
(O3-5)	Barbara Obryk	TLD Calibration at Neutron Field for JET Fusion Facility *B. Obryk, P. Batistoni, U. Fischer, N. Fonnesu, A. Klix, M. Kłosowski, S. Loreti, J. Naish, L. Packer, K. Malik, M. Pillon, S. Popovichev, E. Stamatelatos, T. Vasilopoulou, R. Villari, P. De Felice, M. Pimpinella, L. Quintieri, A. Colangeli, P. Bilski, and JET Contributors*

15:40 - 16:10 *Coffee break*

16:10 – 17:50 **ORAL SESSION 4:**
Solid state dosimetry
Chair: ***Mark Akselrod and Barbara Marczewska***

(I-4)	Eduardo Yukihara (Invited lecture)	2D Ion Beam Dosimetry Using Optically Stimulated Luminescence Films *E.G. Yukihara, M.F. Ahmed, N. Shrestha, S. Greilich, J. Horn*

(O4-1)	Paweł Bilski	Lithium Fluoride Crystals as Fluorescent Nuclear Track Detectors *P. Bilski, B. Marczewska, W. Gieszczyk, M. Kłosowski, T. Nowak, M. Naruszewicz*
(O4-2)	Marco Caresana	Benchmark of PADC from Different Suppliers *M. Caresana, A. Parravicini, S. Coria, A. Stabilini, F. Assenmacher, E.G. Yukihara*
(O4-3)	Jonathan Harrison	Criticality Dosimetry by Unfolding the FNTD Depth Profile of the Neutron-Induced Signal *J. Harrison, B. Moreno, O. Van Hoey, L.C. Mihailescu, F. Vanhavere, M. Million, V. Fomenko, M. Akselrod*
(O4-4)	Steffen Greilich	Towards Sensitivity - Independent Assessment of Linear Energy Transfer for Swift Light Ions in Fluorescent Nuclear Track Detectors *S. Greilich, J. Jansen, A. Neuholz*
(O4-5)	Francesco d'Errico	New Developments and Applications of Superheated Emulsions: Detection of Shielded Special Nuclear Material and Weapons Inspection for Non-Proliferation *F. d'Errico, A. Chierici, S. Philippe*

09:00 – 10:40 **ORAL SESSION 5:**
Neutron spectrometry
Chair: ***Werner Rühm and Rick Tanner***

(I-5)	Vladimir Mares (Invited lecture)	Spectrometry of the Secondary Neutron Field Induced During Treatment in Scanning Proton Therapy Facilities *V. Mares, M. Romero-Expósito, S. Trinkl, J. Farah, C. Domingo, M. Dommert, K. Schinner, L. Stolarczyk, L. Van Ryckeghem, M. Wielunski, P. Olko, R.M. Harrison*
(O5-1)	Andrea Pola	The Extended Energy Neutron Spectrometer SP2: Development and Characterization with Reference Monochromatic Neutron Beams *A. Pola, R. Bedogni, J.M. Gomez Ros, D. Bortot, M.V. Introini, M. Treccani, C. Domingo*
(O5-2)	Jose M. Gómez-Ros	International Comparison Exercise on Neutron Spectra Unfolding in Bonner Spheres Spectrometry *J.M. Gómez-Ros, R. Bedogni, C. Domingo, J.S. Eakins, N. Roberts, R.J. Tanner*
(O5-3)	Hongliang Lu	Uncertainty Evaluation for the Reconstruction of Neutron Energy and Fluence: Application to the μTPC Recoil Detector *H. Lü, T. Vinchon, B. Tampon, E. Chojnacki, N. Fischer*
(O5-4)	Roberto Bedogni	Comparing Bonner Spheres and the CYSP Neutron Spectrometers in the Cosmic Radiation Field on the Zugspitze Mountain (2650 m) *R. Bedogni, V. Mares, A. Pola, T. Brall, W. Ruehm, M.V. Introini, A. Bassanetti, J.M. Gómez-Ros*

(O5-5)	Maite Romero - Expósito	Characterization of the Neutron Field Produced by a 18 MeV Proton Beam Impinging on a Graphite Target Using a Bonner Sphere Spectrometer *M. Romero-Expósito, M.C. Jiménez-Ramos, J. García López, O. Ortega-Gelabert, F. Fernández, C. Domingo*

10:40 - 11:10 *Coffee break*

11:10 – 12:50 **ORAL SESSION 6:**
Neutron sources
Chair: ***Jean Francois Bottollier and Stefano Agosteo***

(I-6)	Marco Costa (Invited lecture)	Intense Thermal Neutron Fields From a Medical-Type Linac: the E_LiBANS Project *M. Costa, N. Amapane, E. Durisi, R. Gerbaldo, V. Monti, U. Nastasi, M. Ruspa, L. Visca, S. Anglesio, A. Pola, D. Bortot, L. Garlati, L. Porta, R. Bedogni, J.M. Gomez-Ros, O. Sans Planell, M. Treccani, G. Giannini, K. Alikaniotis, D. Treleani, M. Vascotto*
(O6-1)	Dmitrii Kasatov	Accelerator Based Neutron Source for Boron Neutron Capture Therapy of Malignant Tumors *D. Kasatov, A. Ivanov, A. Iarullina, Ya. Kolesnikov, V. Kanygin, A. Kichigin, A. Kuznetsov, A. Koshkarev, A. Makarov, L. Mechetina, Yu. Ostreinov, S. Taskaev, I. Shchudlo, E. Sokolova, I. Sorokin, O. Volkova*
(O6-2)	Sławomir Jednoróg	Neutron Monitoring for Dense Plasma Focus Experiment by Means of Activation Technique *S. Jednoróg, B. Bieńkowska, E. Łaszyńska*

(O6-3)	Xinru Chen	Design Features of Cancericidal Nuclide Neutron Knife *Chen Xinru, Chong Yizheng, Shi Yue, Zhou Yongmao*
(O6-4)	Kamil Szewczak	The Asymmetry in Neutron Emission for Plasma Experiments and Their Influence on Occupational Exposure Assessment *K. Szewczak, S. Jednoróg, P. Krajewski*
(O6-5)	Kaouther Bergaui	A Dosimetry Study Around a new Deuterium - Deuterium Neutron Generator by Monte Carlo and Experimental Measurements *K. Bergaoui, N. Reguigui, C.K. Gary, C. Brown, M.A. Piestrup*

12:50 - 14:00 *Lunch*

14:00 - 15:30 **Poster session – 1**

Calibration and metrology
Neutron spectrometry
Instrumentation and new techniques
Radiation protection and microdosimetry

15:30 - 16:00 *Coffee break*

16:00 – 17:40 **ORAL SESSION 7**
Nano and microdosimetry
Chair: ***Antony Waker and Stanisław Pszona***

(I-7)	Valeria Conte (Invited lecture)	Nanodosimetry: Towards a new Concept of Radiation Quality *V. Conte, A. Selva, P. Colautti, G. Hilgers, H. Rabus*
(O7-1)	Paolo Colauti	Microdosimetric Study of Active-Scanning Carbon Ion Beams *P. Colautti, V. Conte, A. Selva, S. Chiriotti, A. Pola, D. Bortot, A. Fazzi, S. Agosteo, M. Ciocca*
(O7-2)	Sonwabile Arthur Ngcezu	Nanodosimetric Characterization of Protons in the Bragg Peak Region *S.A. Ngcezu, H. Rabus, M. Bug, D. Van Der Merwe*

(O7-3)	Marcin Pietrzak	Measurements of Spatial Correlations of Ionization Events in the Track Structure of Carbon Ions *M. Pietrzak, A. Bantsar, S. Pszona*
(O7-4)	Faezeh Forouzan	Development of Heterogeneous Proportional Counters for Neutron Dosimetry *F. Forouzan, A.J. Waker*
(O7-5)	Gerhard Hilgers	Measurement of Correlations Between Two Nanometric Volumes in the Track Structure of ^{241}Am Alpha Particles *G. Hilgers, M. Bug, H. Rabus*
(O7-6)	Davide Bortot	A Novel TEPC for Microdosimetry at Nanometric Level: Response Against Different Neutron Fields *D. Bortot, A. Pola, S. Pasquato, A. Fazzi, S. Agosteo, P. Colautti, V. Conte*

17:45 – 20:00 **Excursion to Cyclotron Centre Bronowice**

09:00 – 10:40 **ORAL SESSION 8:**
Biological effects of neutrons and ions
Chair: ***David Thomas and Kamil Szewczak***

(I-8)	Hans Rabus (Invited lecture)	Prospects for Metrology Related To Biological Radiation Effects of Ion Beams *H. Rabus, W. Yong Baek, M. Bug, V. Dangendorf, U. Giesen, G. Hilgers*
(O8-1)	Giorgio Baiocco	At the Physics-Biology Interface: the Neutron Affair *G. Baiocco, S. Barbieri, G. Babini, J. Morini, D. Alloni, W. Friedland, P. Kundrát, E. Schmitt, A. Ottolenghi*
(O8-2)	Tsuyako Takeyoshi	The Transient Biological Modulation for BNCT: Decrease in ^{18}FBPA Uptake in Normal Tissue and Increase in T/N Ratio in PET Study *T. Takeyoshi, M. Nakamura, R. Fujii, J. Itami, Y. Imahori*
(O8-3)	Carmen Villagrasa	Modelling Early Radioinduced DNA Damages With a new Computing Chain Based on GEANT4-DNA *S. Meylan, S. Incerti, M. Karamitros, I. Clairand, C. Villagrasa*
(O8-4)	Richard Richardson	Re-Examination of Radiation Effects to Nuclear and Mitochondrial Cellular Targets From an Enhanced Thermal Neutron Flux *R.B. Richardson, F. Ali, C. Boyer, C.S. Costello, A. Festarini, I. Gosselin, M.E. Harper, J. Kildea, L.C. Paterson, D. Patten, R. Rogge, M. Stuart*

(O8-5)	Michał Gryziński	Prediction of Relative Biological Effectiveness Using Recombination Chamber in Mixed Radiation Field *M.A. Gryziński*
(O8-6)	Nolan Hertel	Comparison of Neutron Organ Doses for PIMAL Stylized Phantom in Upright and Bent Positions for Standard Irradiation Geometries *S. Dewji, M. Hiller, N. Hertel*

10:40 - 11:10 *Coffee break*

11:10 – 12:50 **ORAL SESSION 9:**
Dosimetry for BNCT
Chair: ***Michał Gryziński and Francesco d'Errico***

(I-9)	Sara Gonzales (Invited lecture)	The Photon Iso-Effective Dose in Cancer Treatments Using Mixed Radiation Fields Based on Dose-Response Assessments in Animals Models S*.J. González, E.C.C. Pozzi, A. Monti Hughes, L. Provenzano, G.A. Santa Cruz, H. Koivunoro, M.R. Casal, V.A. Trivillin, S.I. Thorp, P. Curotto, M.A. Garabalino, E.M. Heber, L. Kankaanranta, H. Joensuu, J. Hopewell, A.E. Schwint*
(O9-1)	Shingo Tamaki	Design Study and Optimization of a Liquid Moderator Based Neutron Spectrometer for BNCT *S. Tamaki, S. Kusaka, F. Sato, I. Murata*

(O9-2)	Matteo Treccani	Developing Radiation Resistant Thermal Neutron Detectors for the E_LiBANS Project *M. Treccani, J.M. Gómez-Ros, O. Sans Planell, R. Bedogni, A. Pola, D. Bortot, L. Garlati, L. Porta, M. Costa, N. Amapane, E. Durisi, R. Gerbaldo, V. Monti, U. Nastasi, M. Ruspa, L.Visca, S. Anglesio, G. Giannini, K. Alikaniotis, D. Treleani, M. Vascotto*
(O9-3)	Yoshinori Sakurai	Remote-Changeable Bonner-Sphere Spectrometer for Characterization of BNCT Irradiation Field *Yoshinori Sakurai, Haruaki Ueda, Ryohei Uchida, Takushi Takata, Hiroki Tanaka*
(O9-4)	Bo-Lun Lai	A Scoping Analysis of Material Activation and Related Quantities at a Boron Neutron Capture Therapy Facility Based on the Be(p,xn) Reaction With 30 MeV Protons *Bo-Lun Lai, Rong-Jiun Sheu*
(O9-5)	Saverio Altieri	Characterization of the Gamma Dose Component in the Neutron Field of a BNCT Irradiation Facility *S. Altieri, S. Bortolussi, S. Fatemi, M. Ferrari, I. Postuma, M. Prata, N. Protti, S. Gallo, M. Marrale*
(O9-6)	Isao Murata	Experimental Verification of Neutron Intensity Monitor with Isomer Production Reaction for p-Li Neutron Source for BNCT *I. Murata, Y. Otani, S. Kusaka, F. Sato*

12:50 - 14:00 *Lunch*

14:00 – 15:40 ORAL SESSION 10:

New techniques and methods 1

Chair: ***Sabine Mayer and Frank Wissman***

(I-10)	Anatoly Rosenfeld (Invited lecture)	Solid State Micro- and Mini-Dosimetry in Particle Therapy *A. Rosenfeld, L. Tran, L. Chartier, D. Bolst, E. Debrot, A. Merchant, M. Newall, S. Guatelli, M. Petasecca, M. Lerch, V. Perevertaylo, M. Povoli, A. Kok, N. Matsufuji, T. Kanai*
(O10-1)	Nicolas Arbor	A New CMOS Sensor for Real-Time Neutrons Monitoring in Radiation Therapy *N. Arbor, R. Combe, H. Elazhar, S. Higueret, P. Meyer, N. Dehaynin D. Husson*
(O10-2)	Masashi Takada	Experimental and Simulated Neutron Response Functions of Thin Neutron Silicon Sensors with Low Gamma-Ray Sensitivity for Fast Neutron Personal Dosimeter *M. Takada, T. Nunomiya, T. Matsumoto, A. Masuda, Y. Watanabe, K. Aoyama, T. Nakamura*
(O10-3)	Soo Hyun Byun	Recent Progress in Multi-Element Gaseous Neutron Dosemeter Development *Z. Anjomani, W.V. Prestwich, S.H. Byun*
(O10-4)	Jovica Atanackovic	Use of GEANT4 Vs. MCNPX for the Characterization of a Boron-Lined Neutron Detector *B.M. Van Der Ende, J. Atanackovic A. Erlandson, G. Bentoumi*
(O10-5)	Paolo Ferrari	Neutron Tracks Reading System Based on One-Shot Image Analysis *P. Ferrari, L. Campani, F. Mariotti*

(O10-6)	Rick Tanner	The effects of revised ICRU dose quantities on the response characteristics of neutron survey instruments *J. Eakins, R. Tanner, L. Hager*

15:50 - 16:15 *Coffee break*

16:15 – 20:00 **Excursion to Wieliczka Salt-Mine**

09:00 – 10:40 **ORAL SESSION 11:**
Out-of-field dosimetry
Chair: ***Marco Silari and Marie Davidkova***

(I- 11)	Wayne Newhauser (Invited lecture)	Modeling of risk of secondary cancers from radiation therapy *W. Newhauser, C. Schneider, L. Wilson, S. Shrestha, M. Lis, W. Donahue*
(O11-1)	Sebastian Trinkl	Characterization of Secondary Neutron Field Produced in Scanning Proton and Carbon Ion Therapy *S. Trinkl, V. Mares, M. Dommert, T. Tessonnier, M. Wielunski, W. Rühm, K. Parodi*
(O11-2)	Katia Alikantios	Measurements of the Neutron Dose Contamination From Medical Linear Accelerators at Different Energies *K. Alikaniotis, M. Severgnini, G. Giannini*
(O11-3)	Željka Knežević	Comparison of Passive Dosimetry Systems in Scanning Proton Radiotherapy- Paediatric Anthropomorphic Phantoms Study *Ž. Knežević, I. Ambrozova, C. Domingo, M. De Saint-Hubert, M. Majer, I. Martínez-Rovira, S. Miljanić, N. Mojżeszek, O. Ploc, M. Romero-Expósito, L. Stolarczyk, S. Trinkl, P. Olko, R.M. Harrison*
(O11-4)	Vladimir Vondracek	Secondary Neutron Field in Radiotherapy- Photon vers. Proton Beam Therapy *V. Vondracek, M. Kralik, Z. Vykydal*

(O11-5)	Georges Al. Magdessi	Secondary Neutrons Around Clinical Proton Beams *G. Al Makdessi, C. Vallhagen Dahlgren, J. Dubeau, S. Enger, R. Maglieri, L. Mirzakhanian, S. Witharana, J. Kildea*

10:40 - 11:10 *Coffee break*

11:10 – 12:50 **ORAL SESSION 12:**
Clinical dosimetry 1
Chair: ***Jan Swakoń and Vladimir Vondracek***

(I-12)	Oliver Jäkel (Invited lecture)	Radiotherapy with light ions at the Heidelberg Ion Beam Therapy Center *O. Jäkel*
(O12-1)	Jeppe Brage Christensen	Track-Structure Theory Applied to Ionization Chambers: A Way to Calculate Recombination Losses in Complex Radiation Fields *J. Brage Christensen, H. Tölli, N. Bassler*
(O12-2)	Marzena Rydygier	Radiotherapy Proton Beam Profile Measurements Using scCVD Diamond Detectors in Single Particle Mode *M. Rydygier, P. Bednarczyk, L. Grzanka, T. Horwacik, M. Jastrząb, T. Nowak, L. Stolarczyk*
(O12-3)	Guillaume Landry	Patient Specific 3D Gel Dosimetry for Proton Therapy *G. Landry, M. Hillbrand, G. Dedes, E.P. Pappas, G. Kalaitzakis, C. Kurz, F. Dörringer, K. Kaiser, M. Würl, F. Englbrecht, O. Dietrich, D. Makris, E. Pappas, K. Parodi*

(O12-4)	Maria Martisikova	Comparison of Mixed Ion Fields Behind Water and PMMA Targets Irradiated with Therapeutic Carbon and Helium Ion Beams *M. Martisikova, G. Arico, R. Gallas, T. Gehrke, S. Berke, J. Jakubek, O. Jäkel*
(O12-5)	Franz Siegfried Englbrecht	An Online, Radiation Hard Proton Energy-Resolving Scintillator Stack for Laser-Driven Proton Bunches *F. Englbrecht, M. Würl, F. Olivari, A. Ficorella, C. Kreuzer, F.H. Lindner, M. Dalla Palma, L. Pancheri, G.F. Dalla Betta, J. Schreiber, A. Quaranta, K. Parodi*

12:50 - 14:00 *Lunch*

14:00 - 15:30 **Poster session – 2**

Solid state dosimetry
Complex radiation fields
Dosimetry in medicine and biology

15:40 - 16:10 *Coffee break*

16:10 – 17:50 **ORAL SESSION 13:**
Clinical dosimetry 2
Chair: ***Michael Waligórski and Maria Martisikova***

(I-13)	Liliana Stolarczyk (Invited lecture)	Dosimetry Methods for Commissioning of Spot Scanning Proton Beam *L . Stolarczyk, J. Gajewski, D. Kędzierska, W. Komeda, A. Kozera, M. Kłodowska, D. Krzempek, M. Liszka, N. Mojżeszek, A. Pędracka, M. Rydygier, B. Sadowski, K. Skowrońska, T. Kajdrowicz, R. Kopeć, P. Olko*

(O13-1)	Immaculada Martinez-Rovira	Hadron Minibeam Radiation Therapy: Feasibility Study at the Heidelberg Ion-Beam Therapy Center (HIT) *L. Martínez-Rovira, W. González, S. Brons, Y. Prezado*
(O13-2)	Cinzia De Angelis	Mailed Dosimetry Auditing in Proton Therapy – Eurados-WG9 Study of Passive Dosimeter in Proton Spot Scanning Beam *C. De Angelis, M. De Saint-Hubert, L. Stolarczyk, Ž. Knežević, J. Kunst, M. Majer, R. Kopeć, P. Olko*
(O13-3)	Hiroaki Kumada	Development of a Multi-Modal Monte-Carlo Based Treatment Planning System *Hiroaki Kumada, Kenta Takada, Hideyuki Sakurai, Akira Matsumura, Takeji Sakae*
(O13-4)	Leszek Grzanka	Monte Carlo Simulation of LET Spatial Distribution in Clinical Proton Beams *L. Grzanka, N. Bassler*
(O13-5)	Cristina Oancea	Dose Distributions Delivered by Double Scattering and Pencil Scanning Beam Systems to Head Phantom Containing Dental Implants *C. Oancea, K. Shipulin, G. Mytsin, A. Molokanov, V. Vondracek, I. Ambrozova, M. Davidkova*

20:00 – 24:00 **Conference dinner**

09:00 – 10:40 **ORAL SESSION 14:**
Space dosimetry
Chair: ***Pawel Bilski and Michael Hajek***

(I-14)	Guenther Reitz (Invited lecture)	Exposure and Risk Analysis for Human Exploration of Deep Space *G. Reitz*
(O14-1)	Tatsuhiko Sato	Comparison of Cosmic-Ray Environments on Earth, Moon, Mars, and in Spacecraft Using PHITS *Tatsuhiko Sato, Aiko Nagamatsu, Haruka Ueno, Ryuho Kataoka, Shoko Miyake, Kazuo Takeda, Koji Niita*
(O14-2)	Adriane C. Mendez Prado	Evaluation of the Expected SEU Rate as a Function of Position Inside an Aircraft *A.C.M. Prado, M.T. Pazianotto, G. Hubert, C.A. Federico*
(O14-3)	Takashi Nakamura	Development of Neutron Detectors for Measurement of Neutrons in Space *Takashi Nakamura*
(O14-4)	Alessio Parisi	Microdosimetric Modelling of the Relative Efficiency of Lithium Fluoride Thermoluminescent Detectors Using PHITS *A. Parisi, O. Van Hoey, P. Mégret, F. Vanhavere*
(O14-5)	Ondrej Ploc	Intercomparison of the Neutron Doses Measured at Aviation Altitudes with Various Radiation Detectors *O. Ploc, D. Kyselová, M. Kákona, V. Štěpán, J. Kubančák, M. Lužová, K. Pachnerová Brabcová, L. Vítková, M. Peksa, M. Sommer, C. Granja, L. Pinsky, Y. Uchihori*

10:40 - 11:10 *Coffee break*

11:10 – 12:50 **ORAL SESSION 15:**
New techniques and methods 2
Chair: ***Maria Majer and Barbara Obryk***

(I-15)	Susana Oliveira Souza (Invited lecture)	Optically Stimulated Luminescent Thin Polymer Films for Neutron Dosimetry *S.O. Souza, F. D'errico, H.R. Lima, M. Ibba, L. Lazzeri*
(O15-1)	Milan Stefanik	Neutron Field Measurement of p(35)+Be Source Using the Multi-Foil Activation Method *M. Stefanik, P. Bem, M. Majerle, J. Novak, E. Simeckova*
(O15-2)	Xandra Campo	Experimental Evaluation of Neutron Shielding Materials *X. Campo, R. Méndez, M.A.S. Lacerda, D. Garrido*
(O15-3)	Mitja Majerle	^{197}Au, ^{209}Bi, ^{59}Co, ^{nat}Fe and ^{169}Tm Cross-Sections Measured by Quasi-Monoenergetic Neutrons in the Energy Range of 18-34 MeV *M. Majerle, E. Šimečková, P. Bém, J. Novák, M. Štefánik*
(O15-4)	Roberto Mendez	Neutron Characterization of ENSA-DPT Type Spent Fuel Casks at Trillo Nuclear Power Plant *R. Méndez, X. Campo, M. Embid, C.A. Yéboles, R. Morales, M. Novo*
(O15-5)	Jacques Dubeau	The Performance of Reference Neutron Instrumentation Inside the Containment of Nuclear Reactors *J. Dubeau, S.S. Hakmana Witharana, A.J. Waker, A. Yonkeu, M. Seydaliev, J. Atanackovic*

12:50 - 13:00 ***Closing ceremony***

13:00 - 14:00 *Lunch*

POSTER PRESENTATIONS - 1

TUESDAY, MAY 16, 2017
14:00 - 15:30

Calibration and metrology
Neutron spectrometry
Instrumentation and new techniques
Radiation protection and microdosimetry

P1- C1 Revision of ISO Standard 8529 – Reference Neutron Radiations
D. Thomas, R. Bedogni, R. Méndez, A. Thompson, A. Zimbal

P1- C2 Experimental and Computational Evaluation of Effective Centre From A Precision Long Counter At Neutron Metrology Laboratory in Brazil
S.S. Fernandes, A. Astuto, K.C.S. Patrão, E.S. Fonseca, W.W. Pereira, R.T. Lopes

P1- C3 Characterization of the Graphite Moderated Thermal Neutron Field at CMI
Z. Vykydal, M. Králík

P1- C4 The Conceptual Design of Neutron Calibration Facility Based on Commercial D-T Generator
K. Szewczak, I. Słonecka, L. Modzelewski, K. Wołoszczuk, Z. Podgórska, S. Jednoróg

P1- C5 Neutron Field Characterization for D-T Generator for Purpose of Calibration Facility Establishment and Occupational Exposure Assessment
K. Szewczak, S. Jednoróg, I. Słonecka

P1- C6 Improvements in the Thermal Neutron Calibration Channel at LNMRI/IRD
A. Astuto, S.S. Fernandes, K.C.S. Patrão, E.S. Fonseca, W.W. Pereira, R.T. Lopes

P1- C7 Emission Anisotropy of LPN/CIEMAT Neutron Sources
M.A. De Sousa Lacerda, R. Méndez-Villafañe, H.R. Vega-Carrillo, X. Campo Blanco

P1- C8 Shaping of Neutron Spectra Emitted From 14-MeV Neutron Generator
E. Łaszyńska, K. Mikszuta, S. Jednoróg, B. Bieńkowska, M. Gierlik, A. Malinowska, J. Rzadkiewicz, A. Szydłowski

P1- C9 Photon Spectra in NPL Standard Radionuclide Neutron Fields
N.J. Roberts

P1- C10 New Characterisation of the Thermal Neutron PILE at the National Physical Laboratory, UK
N.P. Hawkes, N.J. Roberts, P. Salvador-Castiñeira, G.C. Taylor, D.J. Thomas

P1- C11 Factors Influencing the Neutron Emission From a Heavy-Water Moderated Californium Source
G.C. Taylor, A.K. Thompson

P1- C12 ^{241}AmBe(α,n) Characterization for a new Laboratory Facility in Brazil
W.W. Pereira, J.J.S. Estrada, K.C.S. Patrão, S.P. Leite

P1- C13 New Thermal Neutron Field Produced by Graphite Moderator and Am-Be Source at KRISS
Hyeonseo Park, Jungho Kim, Yun Ho Kim

P1- C14 Characterisation of Neutron Field at ANSTO Instrument Calibration Facility
H. Meriaty

P1- C15 GEANT4 Simulation and Measurement of Neutron Energy Spectra in High-Energy Reference Field Facility (CERF)
T. Brall, M. Dommert, W. Rühm, S. Trinkl, M. Wielunski, V. Mares

P1- C16 Reference Neutron Fields in Calibration Laboratory – Simple Dosimetric Parameters and Their Changes in Time
S. Domański, P. Tulik, B. Boimski

P1- C17 Correction of Room-Scattered Neutrons in Calibration of Neutron Personal Dosimeters
Jungho Kim, Hyeonseo Park

P1- C18 Adjustment of an AmBe Source to Simulate a Cf-252 Source Spectrum
N.E. Hertel, A. Singletary, J. Saunders, T. Gates, A. Tee, P. Burke

P1- C19 Characterization of Neutron Fields From Bare and Heavy Water Moderated ^{252}Cf Spontaneous Fission Source Using Calibrated Bonner Sphere Spectrometer
J. Atanackovic, A. Yonkeu, J. Dubeau, S.H. Witharana, N. Priest

P1- C20 Portable Irradiator by Plutonium-Beryllium Source for Manganese Sulphate Bath Efficiency Measurements
F.S. Silva, M.M. Martins, C.C. Conti, S.P. Leite, W.W. Pereira

P1- C21 Evaluation of Neutron Scattering Correction Using the Semi-Empirical Method and the Shdow Cone Method for the Neutron Field of the Korea Atomic Energy Research Institute
Seung Kyu Lee, Sang In Kim, Insu Chang, Jang-Lyul Kim, Jung Il Lee, Hyoungtaek Kim, Min Chae Kim, Bong-Hwan Kim

P1-N1 Calculations of Shutdown Dose Rate for the TPR Spectrometer of the High-Resolution Neutron Spectrometer for ITER
A. Wójcik-Gargula, G. Tracz, M. Scholz

P1-N2 Characterization of the Epithermal Neutron Field Produced by p+^{7}Li Reaction in a Tandem Accelerator Using a Bonner Sphere Spectrometer
M. Romero-Expósito, S. Viñals, O. Ortega-Gelabert, B. Fernández, J. Praena, C. Domingo

P1-N3 Development, Validation and Testing of a Simplified Bonner Sphere System for Rapid Neutron Field Characterization
O. Van Hoey, F. Vanhavere, L. Verbraecken, Y. Palahina

P1-N4 The Measurement of Neutron Energy Spectra in Different Licensed Facilities Using the Nested Neutron Spectrometer
A. Licea

P1-N5 Algorithm Based on Bee Colony for Optimization of Neutron Spectra Unfolding Obtained with Bonner Spheres
E.R. Silva, B.M. Freitas, D.S. Santos, C.L.P. Mauricio

P1-N6 Performance of CYSP: a new Directional Neutron Spectrometer with Broad Energy Interval
J.M. Gómez-Ros, R. Bedogni, A. Pola, D. Bortot, M.V. Introini, O. Sans-Planell, M. Treccani, C. Domingo

P1-N7 Performance of the Innovative Neutron Spectrodosimeter in Hospital Measurements
K. Alikaniotis, E. Battistella, G. Giannini, F. Longo

P1-N8 Neutron Spectrometry of the $^{9}Be(d,n)^{10}B$ Reaction with a µTPC Detector
B. Tampon, N. Sauzet, D. Santos, O. Guillaudin, M. Capoulat, A.A. Valda, T. Vinchon, P. Querre, P. Mastinu, J. Praena

P1-N9 Characterization of a Newly Developed Multi-Cylindrical Moderator Neutron Spectrometer
Thiansin Liamsuwan, Jatechan Channuie, Sarinrat Wonglee, Munehiko Kowatari, Sho Nishino

P1-I1 Development of Light-Weight Neutron Survey Meter
Tomoya Nunomiya, Shigeru Abe, Takahiro Amano, Takashi Nakamura

P1-I2 Development of High Efficiency Proton Recoil Telescope for D-T Neutron Fluence Measurement
Yoshihiko Tanimura, Michio Yoshizawa

P1-I3 Experimental and Monte Carlo Investigations of BCF-12 Small-Area Plastic Scintillation Detectors for Neutron Pinhole Camera
J. Bielecki, K. Drozdowicz, A. Igielski, W. Janik, M. Scholz, U. Więcek, U. Woźnicka, A. Wójcik-Gargula

P1-I4 A User Friendly Tool for the Validation of Nuclear Data Based on the ASPIS Series of Experiments From the SINBAD Database
A. Milocco, I. Kodeli

P1-I5 Computer Code for Neutron Camera Modelling
K. Mikszuta, B. Bieńkowska, R. Miklaszewski

P1-I7 Timepix as a Tool for Neutron Dosimetry
P. Rubovič, D. Ekendahl, I. Štekl, J. Hůlka

P1-I8 Monte Carlo Simulation of the Radiation Source Term From $[^{18}O]H_2O$ Target Bombardment with Protons of 16.5 MeV
J.A. Benavente-Castillo, M.A.S. Lacerda, T.C.F. Fonseca, T.A. Da Silva

P1-I9 Calculation of LNE-IRSN-MIMAC µTPC Response Function and Validation by ^{252}Cf Neutron Field
B. Tampon, N. Sauzet, D. Santos, T. Vinchon, P. Querre

P1-I10 Evaluation of Cadmium Telluride (CdTe) for Neutron Detection in High Intensity Laser Facilities
J-M. Alvarez, M. Hernanz, J-L.Galvez, R. Mendez, X. Campo, G.Gatti, L.Volpe, L.Roso

P1-I12 Intercomparison of EPR/ALANIE Dosimetry Procedures for Bruker ESP300E and Magnettech MS5000 Spectrometers
B. Michalec, G. Mierzwińska, A. Olbrich

P1-I13 Characterization of CLYC Scintillator Coupled with SiPM for Fast Neutron Detection
N. Dinar, D. Celeste, M. Silari

P1-I14 Development of ToF-Spectrometry for Laser-Accelerated Protons Using a Novel Silicon Detector
M. Würl, F. Englbrecht, S. Lehrack, D. Haffa, C. Kreuzer, F.H. Lindner, S. Reinhardt, S. Karsch, W. Assmann, L. Tran, M. Petasecca, M. Lerch, J. Schreiber, A. Rosenfeld, K. Parodi

P1-I15 Development of Active Neutron Personal Dosimeter with Small Gamma-Ray Sensitivity Using Thin Silicon Neutron Sensor
K. Aoyama, T. Nunomiya, M. Takada, T.Nakamura

P1-I16 Determination of The Background of ^{3}He-Filled Proportional Counters Used for Low-Level Neutron Measurements
M. Reginatto

P1-I17 Calculation of Dose Distribution in the Active Volume of Recombination Chamber for Q(L) Determination
M. Maciak

P1-I18 Investigation on Radiation Shielding Properties of Special Concretes in Neutron Fields
Ł. Murawski, M. Maciak, M.A. Gryziński, S. Domański

P1-I20 Neutron Workplace Spectrometry (Energy and Direction) Using TL Detectors: First Approach and Response Functions
D. Radeck, M. Luszik-Bhadra, T. Haninger, M. Reginatto

P1-R1 Electron Spectroscopy on Gold Nanoparticles for the Estimation of their Dose Enhancement
B. Rudek, M. Bug, T. Dressel, E. Gargioni

P1-R2 Consistency in Measurement of Nanodosimetric Quantities: Intercomparison Between Three Nanodosimeters
A. Bantsar, P. Colautti, V. Conte, G. Hilgers, D. Moro, M. Pietrzak, S. Pszona, H. Rabus

P1-R3 State of the Art of Instrumentation in the Experimental Nanodosimetry
A. Bantsar, M. Bug, V. Dangendorf, G. Hilgers, D. Moro, M. Pietrzak, S. Pszona, H. Rabus

P1-R4 Portable Nanodosimeters: a Monte Carlo Feasibility Study
A. Selva, V. Conte, P. Colautti

P1-R5 Microdosimetric Simulations of Carbon Ions Using Fluka Code
S. Chiriotti, P. Colautti, V. Conte, A. Mairani, F. Vanhavere

P1-R7 Real-Time Microdosimetric Data Analysis with a MCA-like Interface
S.S. Hakmana Witharana, J. Dubeau, E.M. Sacay

P1-R8 Comparison of the Neutron Dose Rate at Different Work Place Fields Indicated by Commercial Radiation Protection Survey Instruments
R. Galeev, E. Hohmann, E. Musto, S. Mayer

P1-R9 EURADOS 2017 Intercomparison for Whole Body Neutron Dosimetry: Preliminary Results
S. Mayer, M.A. Chevallier, E. Fantuzzi, M. Hajek, M. Luszik-Bhadra, D.J. Thomas, R. Tanner, F. Vanhavere

P1-R10 Comparison of the Neutron Response of two Different TLD Albedo Dosemeters
B.M. Freitas, A.X. Da Silva, W.W. Pereira, C.L.P. Mauricio

P1-R11 Radiation Protection of a Proton Beamline at ELI-Beamlines
S. Bechet, V. Olsovcova, S. Rollet, R.Versaci

P1-R12 Determination of Neutron Effective Doses in Whole-Body Point Source Exposures
R.M. Ribeiro, D. De Souza-Santos

P1-R13 Personal Neutron Dosimetry in Nuclear Power Plant and Research Reactor with TL and Solid State Nuclear Track Etch Detectors
P. Szántó, S. Deme, J. Pálfalvi, T. Pázmándi, A. Strádi, I.C. Szabó

POSTER PRESENTATIONS - 2

THURSDAY, MAY 18, 2017
14:00 - 15:30

Solid state dosimetry
Complex radiation fields
Dosimetry in medicine and biology

P2-S2 Superheated Liquid Droplet as Alpha Detectors for Uranium, Thorium and Samarium Alpha Emitters: Modelization of Droplet Size Effect and Results
T. Morlat, M. Felizardo, A.C. Fernandes

P2-S3 Study of TL Response of LiF:Mg,Cu,P and $CaSO_4$:Dy Large Area Thermoluminescent Detectors to Proton Beams
M. Kłosowski, J. Gajewski, P. Bilski

P2-S4 Nuclear Heating in LiF TLD Dosimeters in Fusion Neutron Field – Trial of Direct Comparison of Experimental and Simulated Results
W. Pohorecki, B. Obryk

P2-S5 TLD High-Dose Dosimetry of Reactor Neutrons
B. Obryk, K. Malik, A. Igielski, A.Z. Kurowski, J. Dankowski, R. Prokopowicz, K.Pytel

P2-S6 $Li_2{}^{10}B_4O_7$:Ag,Tb Phosphor and its Neutron Sensitivity for Dosimetry Applications
A. Ozdemir, V. Altunal, V. Guckan, K. Kurt, S. Iflazoglu, Z. Yegıngıl

P2-S7 Studying $^6Li_2CO_3$ As A Neutron Converter for Investigation of the Neutron Responses From Synthesized BeO Pellets Using Optically Stimulated Luminescence (OSL)
V. Altunal, V. Guckan, A. Ozdemir, K. Kurt, Z. Yegingil

P2-S8 Response of Differently Doped Lithium Magnesium Phosphate Crystals to Neutrons, Protons and Alpha Particles
W. Gieszczyk, P. Bilski

P2-S9 Dosimetry with Salt (NaCl) in Mixed Radiation Fields of Photons and Neutrons
D. Ekendahl, P. Rubovič, H. Malá, P. Žlebčík, O. Huml

P2-S10 Imaging of Proton Beams with LiF Crystals
B. Marczewska, P. Bilski, T. Nowak, W. Gieszczyk, M. Kłosowski

P2-S11 Neutron Response Functions of Superheated Liquid Detectors
A.C. Fernandes, T.A. Morlat, M. Felizardo

P2-S12 Energy Response of Fluorescent Nuclear Track Detectors to Monoenergetic Neutrons
V. Fomenko, B. Moreno, M. Million, J. Harrison, M. Akselrod

P2-S13 Optical and Atomic Force Microscopy Characterization of Track Enlargement Techniques for PADC Neutron Detectors
D.A.A. De Vasconcelos, R. Ciolini, M. Marrale, G. Buscarino, F. d'Errico

P2-S16 High Dose Fast Neutron Dosimetry Using PADC Plastic Nuclear Track Detectors and Graylevel Analysis
A. Stabilini, K. Meier, E.G. Yukihara

P2-S17 Direct Comparison Between PADC and FNTD Neutron Detector Systems in Blind Tests
E.G. Yukihara, M.S. Akselrod, V. Fomenko, J. Harrison, M. Million, F. Assenmacher, A. Stabilini, K. Meier

P2-S19 Synthetic Un-Doped and Doped $CaSiO_3$ Polycrystal for Gamma and Neutron Detection
C.D. Gonzales, S. Watanabe, C.C. Bueno, R.F. Gennari, N.F. Cano

P2-S20 Stopping Power and Range Calculation of Protons in TLD-500 (Al_2O_3) and TLD-100 (LiF) with the new Formula of Bethe Bloch Equation
R. Dilek, P. Olko, J. Swakoń

P2-S21 On the Response of Luminescence Detectors in Secondary Radiation Field During Proton Therapy with Pencil Beam Scanning, PBS
P. Olko, Z. Knežević, J. Kubančák, M. Majer, S. Miljanic, N. Mojżeszek, L. Stolarczyk, S. Trinkl

P2-F1 Effective Dose Evaluation for Flight Routes of Interest in Taiwan Due to Galactic Cosmic Radiation
An-Lun Li, Wei-Fan Pan, Rong-Jiun Sheu

P2-F2 A Cosmic Radiation Ground Monitoring Station Operating Under the South Atlantic Anomaly Region
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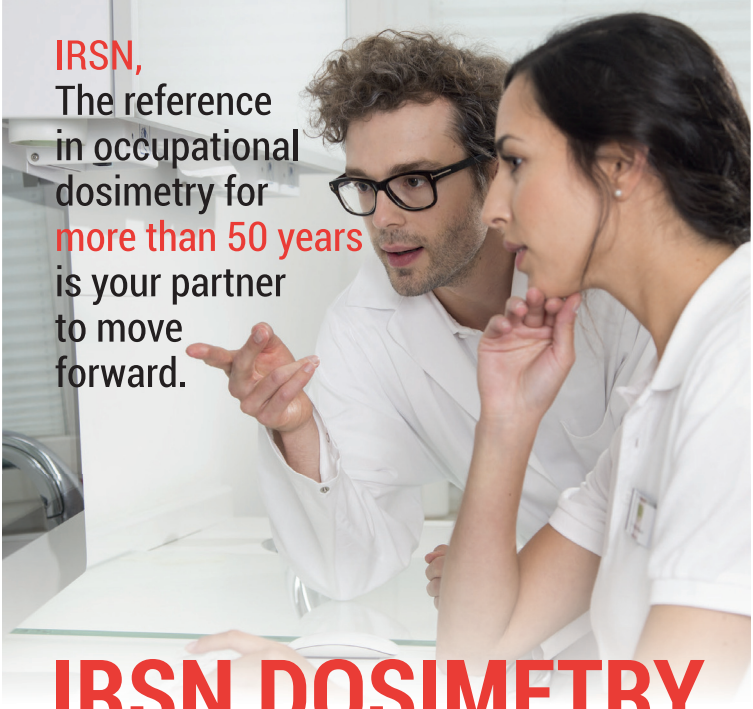

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