

ERPW 2026

Conference Programme



MONDAY, 5 OCTOBER

13:00 – 18:00	RENEB
14:00 – 18:00	GA MELODI
15:00 – 17:00	Early Career Researcher
16:30 – 18:30	Pianoforte ExeB

FRIDAY, 9 OCTOBER

09:00 – 13:00	GA ALLIANCE
09:00 – 11:00	LCA4NORM + Multiplex
09:00 – 11:00	GIROSCOPE + CATAPULT
09:00 – 10:30	GA EURAMED
09:30 – 12:00	RRADEW
13:00 – 15:00	MEENAS

TUESDAY, 6 OCTOBER

09:00 – 09:30	Opening Plenary — Welcome & Conference Framing  Inge Paulini (President, BfS), Annette Röttger (Member of the Executive Committee, PTB)		
09:30 – 10:15	Keynote — Key Topic 1: Security and Preparedness  Frank Sauer		
10:15 – 10:45	Coffee Break 		
10:45 – 12:00	PARALLEL SESSIONS		
	S1.1 Radiation Safety in Crisis Situations	S2.1 AI for Monitoring & Dose Management	S3.1 One Health & Environment
	Chair Florian Gering (tbc) Co-Chair Marie Simon-Cornu	Chair Irène Korsakissok Co-Chair Dorottya Jakab, Antonio Sarno	Chair Ivica Prlić Co-Chair Franck dal-Molin
	10:45–10:55 REGULAR TALK S1.1 – 1 On the health significance of reference levels adopted in radiological emergency situations: towards complementary metrics?  Quentin Couanau	10:45–10:58 TALK WITH Q&A S2.1 – 1 Machine-Learning-supported probabilistic indoor radon mapping for population exposure monitoring and dose management in Germany  Eric Petermann	10:45–10:58 TALK WITH Q&A S3.1 – 1 Human-Mouse Comparison of Radiation-Related Cancer Mortality Using the Two-stage Clonal Expansion Model  Tatsuhiko Imaoka
	10:55–11:05 REGULAR TALK S1.1 – 2 CITISTRA – a distributed citizen-based network of mobile ionizing radiation detectors: from emergency preparedness to routine environmental monitoring. Project concept and implementation in Poland  Renata Kierepko	10:58–11:11 TALK WITH Q&A S2.1 – 2 Quality Assessment and Integration of Citizen Environmental Radiation Monitoring during Nuclear Emergencies: Activities of the CITHARA Project  Sara Della Monaca	10:58–11:11 TALK WITH Q&A S3.1 – 2 Development of a dosimetric voxel model for a marine mammal  Elin Wefer
	11:05–11:15 REGULAR TALK S1.1 – 3 From meteorology to improved thresholds in nuclear surveillance networks  Katharina Münster	11:11–11:24 TALK WITH Q&A S2.1 – 3 Machine Learning Enhanced Analysis of Silica Glass Jewellery Beads for Thermoluminescence Dosimetry Health Monitoring  Lukasz Tomaszewski	11:11–11:24 TALK WITH Q&A S3.1 – 3 Refining the Adverse Outcome Pathway (AOP) for radon-induced lung cancer: integrating genetic variability and environmental co-exposures to improve risk characterization  Klea Hondro
	11:15–11:25 REGULAR TALK S1.1 – 4 Developing a radiation-protection strategy considering residual doses  Mario Gaspar Quarenta	11:24–11:37 TALK WITH Q&A S2.1 – 4 ACCREDITED project: advancement in computational dosimetry for complex radiation fields  Daniela Passeri	11:24–11:37 TALK WITH Q&A S3.1 – 4 Internal accumulation and reproductive toxicity of chronic radium-224 exposure in Caenorhabditis elegans  Hengyi Zhu
	11:25–11:35 REGULAR TALK S1.1 – 5 Protecting forces deployed during nuclear security events: Trusted methods and new innovation  Emily Alice Kroeger	11:37–12:00 Joint Discussion	11:37–11:50 TALK WITH Q&A S3.1 – 5 Low Natural Background Radiation Induces Functional and Transcriptomic Reprogramming of Human Mesenchymal Stromal/Stem Cells  Nicola Alessio
	11:35–11:40 PITCH TALK S1.1 – 6 PREDICT: How to improve simulation models for nuclear detonation events  Wolfgang Raskob		11:50–12:03 TALK WITH Q&A S3.1 – 6 A decade of radioactive contamination in Fukushima: reproductive alteration in tree frogs across biological scales  Olivier Armant
	11:40–11:45 PITCH TALK S1.1 – 7 Current Research and Technological Status of TL/OSL Retrospective Dosimetry and Radiological Characterization of Candidate Materials  Byungmin Lee		12:03–12:18 Joint Discussion
	11:45–12:00 Joint Discussion		
12:00 – 13:00	Lunch Break 		
13:00 – 14:00	MEENAS <i>Chair: Filip Vanhavere</i>		
14:00 – 14:45	Welcome Address  Carsten Schneider, Federal Minister for the Environment, Germany		

14:45 – 15:15

Coffee Break 

15:15 – 16:30

EMN / Metrology

Chair: Annette Röttger —  Talks: Marko Esche (Demonstrating compliance with legal metrology requirements through risk assessment), Hayo Zutz (Type Testing of radiation protection dosimeters in Germany), Rolf Behrens (From dosimeter development to routine use – Standards and Uncertainties)

16:30 – 18:00

FLASH TALKS & POSTER SESSION

16:30-17:00

 Selected participants present their posters to the plenary in brief 3-minute flash talks.

- **TFT 1** – Digital Simulation Tool for Assessing the Resilience of Radiological Emergency Preparedness, Response and Recovery Systems During Wartime — Thomas Makumbi
- **TFT 2** – Radiological Incident Scenarios in the TITAN 3 Training Programme — Yannick Verbele
- **TFT 3** – Development of Advice for Communication on Protective Actions in Nuclear Detonation Scenarios — Christiane Pözl-Viol
- **TFT 4** – Dietary Intake of Natural Radionuclides among Children and Adolescents in Germany — Michaela Achatz
- **TFT 5** – Bridging Radiation Protection and Life Cycle Assessment: Integrating NORM into Holistic Sustainability Assessment — Boguslaw Michalik
- **TFT 6** – Non-cancer Effects of Ionizing Radiation and the Detriment – Are We Still on the Right Way? Reconsidering Hereditary Effects and Cardiovascular Diseases in Radiation Protection — Peter Scholz-Kreisel
- **TFT 7** – Occupational Radon Exposure in Romania: A Comprehensive Study Using Passive and Active Sensors — Denisa Valentina Negreanu
- **TFT 8** – Radon at Workplaces: What We Expected and What Ten Years of Implementation Taught Us — Kateřina Navrátilová Rovenská
- **TFT 9** – Dose reconstruction for the international pooled analysis of uranium processing workers (iPAUW) study: harmonization and results — Estelle Davesne
- **TFT 10** – Bone Marrow Extracellular Vesicles of Distinct Cellular Origins May Differentially Mediate Radiation Damage — Martina Forgács

17:00-18:00



Walk through Poster Exhibition

18:00

END

18:00 – 20:00

GA PIANOFORTE

09:00 – 09:45	Keynote — Key Topic 2: Radiation Protection in a Changing World Jonas Muff		
09:45 – 10:15	Platform Statements (6 × 5 minutes) Brief statements from the platforms on their priorities, contributions, and strategies in the context of AI-driven innovation and digital transformation		
10:15 – 11:00	Roundtable Discussion (cross-platform) Joint discussion building on the platform statements, focusing on AI-related challenges, opportunities, and cross-platform collaboration; <i>WHO</i>		
11:00 – 12:00	ALARA & LNT (cross-platform) — "Are we too conservative in radiation protection?" Moderated, multi-stakeholder panel. Chair: Fieke Dekkers. Panellists: Claudia Engelhardt (HERCA), Werner Rühm (ICRP), others tbc		
12:00 – 13:15	Lunch Break		
13:15 – 14:30	PARALLEL SESSIONS		
S1.2	S2.2	S3.2	
Environmental Preparedness & Recovery	AI in Medical Radiation Protection	Nuclear Medicine & Theranostics	
Chair Rodolphe Gilbin Co-Chair Jelena Popic	Chair Christoph Hoeschen Co-Chair Katrine Riklund	Chair Weibo Li Co-Chair Uta Eberlein	
13:15–13:25 REGULAR TALK S1.2 – 1 From Principles to Practice: How Is Environmental Radiological Protection Really Applied Worldwide? Mike Webley	13:15–13:28 TALK WITH Q&A S2.2 – 1 VERIFIED – Real time 2D dosimetry system in a highly realistic anthropomorphic thorax phantom Luana Nascimento	13:15–13:25 REGULAR TALK S3.2 – 1 Reference compartmental models for biokinetics and dosimetry of 68Ga- and 18F-labelled prostate-specific membrane antigen ligands [68Ga]Ga-PSMA-11 and [18F]F-PSMA-1007 Alexandra Kamp	
13:25–13:35 REGULAR TALK S1.2 – 2 40 years of post-Chornobyl retrospective dosimetry: accomplishments and implications for future events Vadim Chumak	13:28–13:41 TALK WITH Q&A S2.2 – 2 Real-Time Hand Deformation Modelling and Syringe/Vial Segmentation for Extremity Dose Monitoring in Nuclear Medicine Francisca Abbey Blay	13:25–13:35 REGULAR TALK S3.2 – 2 Bridging Physics and Biology for Internal Emitters: The FORRCE Approach to Mechanistic Dose-Response Modelling Ana Vaniqui	
13:35–13:45 REGULAR TALK S1.2 – 3 Best practices for establishing a citizen science network for ionizing radiation monitoring Anna Mrozik	13:41–13:54 TALK WITH Q&A S2.2 – 3 Radiation FAIR and Open Science: Advancing Data Sharing for Future Radiation Protection Omid Azimzadeh	13:35–13:45 REGULAR TALK S3.2 – 3 Inhalation dose assessment for medical staff and caregivers exposed to Rn-219 gas and its progeny exhaled from patients undergoing treatment with Ra-223-dichloride Weibo Li	
13:45–13:55 REGULAR TALK S1.2 – 4 Improvements in atmospheric dispersion modelling and protective action strategies in case of nuclear detonations – Overview of the PREDICT project Clemens Woda	13:54–14:07 TALK WITH Q&A S2.2 – 4 A Machine Learning methodology for dose estimates in x-ray breast imaging for arbitrary patients based on a breast model with patient-specific fibroglandular distribution Antonio Sarno	13:45–13:55 REGULAR TALK S3.2 – 4 A Gestation-Dependent Biokinetic Model of Foetal Thyroid Dose Following Clinical Radioiodine Procedures Bill Kamtchou	
13:55–14:05 REGULAR TALK S1.2 – 5 Source-term screening for a Copenhagen Atomics-like molten salt reactor Josef Hisanawi	14:07–14:12 PITCH TALK S2.2 – 5 Interactions between leptin, sex hormones, and radiation alter gene expression responses in breast cancer cells Joanna Tobiasz	13:55–14:05 REGULAR TALK S3.2 – 5 Setting up an in-house TL based environmental dose monitoring system for the NM department at a major public hospital Matthias Sultana	
14:05–14:10 PITCH TALK S1.2 – 6 Challenging RNA seq Data Analysis Under Low Signal-to-Noise Conditions: Application to Radiation and Chemical Co-Exposure Imene Garali	14:12–14:17 PITCH TALK S2.2 – 6 Human-Centred Implementation of AI in Medical Radiology: Workforce Barriers, Trust and Governance in Israeli Radiology Lior Moskovich	14:05–14:10 PITCH TALK S3.2 – 6 Development and Preliminary Validation of a Voxel-Dosimetry-Based Treatment Planning System (TPS) for β-Emitting Radionuclide Therapy Haijing Jin	
14:10–14:15 PITCH TALK S1.2 – 7 Life-time attributable risk of cancer compared to collective dose detriment in Sweden after the Chernobyl Nuclear Power Plant accident Mats Isaksson	14:17–14:30 Joint Discussion	14:10–14:15 PITCH TALK	

14:15–14:30 <i>Joint Discussion</i>		S3.2 – 7 Development of a Monte Carlo occupational radiation dosimetry model for surgeons during liver transplantation post-90Y Selective Internal Radiation Therapy (SIRT)  <i>Una Maguire</i> 14:15–14:20 PITCH TALK S3.2 – 8 Auger-Emitting Radionuclides in Nuclear Medicine: Addressing Unrecognized Occupational Exposure Risks  <i>Akash Jana</i> 14:20–14:30 Joint Discussion
14:30 – 15:00	Coffee Break 	
15:00 – 16:30	FLASH TALKS & POSTER SESSION	
15:00-15:30	 <i>Selected participants present their posters to the plenary in brief flash talks, followed by a gallery walk through the poster exhibition.</i> WFT 1 – CITISTRA – Sociological aspects of citizen radiation measurements — Marie Davídková WFT 2 – Protection Under Pressure: Protective Actions Following Nuclear Detonation — Emma Davidson WFT 3 – From Laboratory Validation to Routine Environmental Monitoring: Deployment of the CzechRad Detector in a Citizen-Based Ionizing Radiation Monitoring Network — Mateusz Krzysiek WFT 4 – A viable method for quantifying residual radioactivity in vivo by scintigraphy following iodine-131 treatment — Xiaoxi Pang WFT 5 – Three-Dimensional (3D) Mapping of Radiation Response in Multi-layered Gafchromic LD-V1 Films Irradiated with fluorodeoxyglucose (FDG) — Mohammad Yoshandi WFT 6 – Education and Training for Sustainable and Resilient Radiation Monitoring Capabilities in EPR — Benjamin Zorko WFT 7 – Spatial-temporal evolution and potential source identification of 137Cs in ground level air in Sweden — Fran Pinero-García WFT 8 – Influence of time changes in the source term on the transfer of radionuclides to groundwater from liquid discharges in NORM industries using synthetic test scenarios — Francisco Javier Guillén Gerada WFT 9 – Beyond DNA Damage: Cerebellar Microenvironment Drives Radiation-Induced Tumorigenesis — Barbara Tanno WFT 10 – Role of the Cerebellar Microenvironment Response to Ionizing Radiation in the Induction and Progression of Medulloblastoma: Evidence from an Ex Vivo Organotypic Culture Model — Francesca Antonelli	
15:30-16:30	 <i>Walk through Poster Exhibition</i>	
16:30 – 17:30	Radiation Effects on the Immune System (REIS2026) — MELODI Workshop Summary and Discussion <i>Chairs: Serge Candeias, Florence Miller.  Speakers: Katalin Lumniczky, Alexandra Mekes-Adamczyk, Anna Dubrovska, and Serge Candeias</i> Radiation & the Immune System: Diversity Drives Response. Four experts will examine key aspects of the interplay between ionizing radiation and the immune system, highlighting how immune variability influences radiation responses.	
18:00 – 21:00	Get Together	
21:00	END	

09:00 – 09:45			Keynote — Key Topic 3: Quality of Life & One Health			 Ursula Nestle		
09:45 – 10:15			Coffee Break					
10:15 – 11:30			PARALLEL SESSIONS					
S1.3			S2.3			S3.3		
RP in the Nuclear Renaissance – New Technologies, New Challenges			Innovation in Therapy & Imaging			Patient-centred Radiation Protection		
Chair Anna Wawrzyńczak-Szaban			Chair Christoph Hoeschen			Chair Yevgenya Tomkiv		
Co-Chair Fabrizio Gabrielli			Co-Chair Katrine Riklund			Co-Chair Paddy Gilligan		
10:15–10:25 REGULAR TALK			10:15–10:28 TALK WITH Q&A			10:15–10:25 REGULAR TALK		
S1.3 – 1 Emergency Planning Zones Across Europe for Novel Nuclear Reactors: Practical Differences in National Implementation			S2.3 – 1 Study of actinide decontamination using an ex vivo model of damaged rat skin			S3.3 – 1 Strengthening Radiation Protection Through Shared Responsibility: Healthcare Professionals' Perspectives from South Africa		
 Anna Wawrzyńczak-Szaban			 Laurie De Castro			 Moyahabo Makgato		
10:25–10:35 REGULAR TALK			10:28–10:41 TALK WITH Q&A			10:25–10:35 REGULAR TALK		
S1.3 – 2 Validation of JRODOS and QUIC for atmospheric dispersal simulations in urban environments			S2.3 – 2 Implications of Revised Skin Contamination Dose Coefficients for High Energy Alphas			S3.3 – 2 Prevention and minimization of patient risks in light of the significant increase in the number and availability of CT and Angiographic devices in Georgia		
 Michał Jędrzejczyk			 Holly Laakso			 Davit Nadareishvili		
10:35–10:45 REGULAR TALK			10:41–10:54 TALK WITH Q&A			10:35–10:45 REGULAR TALK		
S1.3 – 3 Research on Key Technologies for Digital Radiation Protection and the Development of the SMARP System in Nuclear Facilities			S2.3 – 3 Optimising CT Head Imaging in Mild Traumatic Brain Injury: A Biomarker Guided Approach to Radiation Protection			S3.3 – 3 Post-Irradiation Remodeling in Estrogen-, Progesterone- and Leptin-Stimulated Breast Epithelial Cells		
 Peitao Song			 Paul Tansey			 Domenico Aprile		
10:45–10:55 REGULAR TALK			10:54–11:07 TALK WITH Q&A			10:45–10:55 REGULAR TALK		
S1.3 – 4 A virtual reality platform for radiation protection training: from technological curiosity to effective learning tool			S2.3 – 4 Optimizing the benefit-risk ratio in breast cancer diagnosis and radiotherapy through molecular, cellular, and imaging signatures of tumour heterogeneity			S3.3 – 4 Ionizing radiation cancer risks modelling associated with screening practices for breast and lung cancer		
 Nicolas Arbor			 Katalin Lumniczky			 Marie-Odile Bernier		
10:55–11:05 REGULAR TALK			11:07–11:12 PITCH TALK			10:55–11:05 REGULAR TALK		
S1.3 – 5 Assessing the Environmental and Radiological Impact of Small Modular Reactors (SMRs) Across Different Landscapes			S2.3 – 5 Boron–Gadolinium Combined Neutron Capture Therapy for the Treatment of Malignant Prostate Cancer and Its Underlying Mechanisms			S3.3 – 5 Estimation of Cumulative Effective Dose and Radiation Risk from Multimodality Imaging in Pediatric Congenital Heart Disease: an Italian Single-Centre Experience		
 Anca Tacu			 Xiaoxi Pang			 Francesca De Monte		
11:05–11:10 PITCH TALK			11:12–11:17 PITCH TALK			11:05–11:10 PITCH TALK		
S1.3 – 6 Physics-Informed Gaussian Process regression for 3D dose rate field reconstruction in decommissioning environments			S2.3 – 6 Medical diagnostic radiation promotes murine Apc/Kras-driven colon carcinogenesis			S3.3 – 6 Diagnostic radiology procedures during pregnancy: Initial findings from SONORA in phantom measurements and EURADOS WG12 multi centre fetal dose estimations		
 Federica Roberto			 Guillaume Vares			 Christos Pafilis		
11:10–11:15 PITCH TALK			11:17–11:22 PITCH TALK			11:10–11:15 PITCH TALK		
S1.3 – 7 Preliminary Results of the GIROSCOPE Model Intercomparison Benchmark: Validation Against in Situ Close-Range Dispersion Measurements			S2.3 – 7 Integrated Biomarkers of Radiation Exposure, Individual Radiosensitivity and Radiation-Induced Genetic Instability: Applications in Biodosimetry and Radiation Protection			S3.3 – 7 CLAUD-IT: Improving clinical audits across European borders		
 Guilhem Balvet			 Igor Beliaev			 Esther Koke		
11:15–11:20 PITCH TALK			11:22–11:37 Joint Discussion			11:15–11:30 Joint Discussion		
S1.3 – 8 Design and validation of novel active ambient neutron dosimeters: addressing technological gaps for a changing radiation protection landscape								
 Ariel Tarifeno-Saldivia								
11:20–11:30 Joint Discussion								
11:30 – 12:30			Lunch Break					
12:30 – 13:30			PIANOFORTE					

13:30 – 14:30	Round Table: Combined Exposures and Cancer Risk – Gaps in Knowledge and Research Priorities <i>Chair: Andrzej Wojcik.  Speakers: Richard Wakeford, Deborah Oughton, Christophe Badie, Irina Lehmann (all tbc)</i>
14:30 – 15:15	Poster Walk / Coffee Break  + 
15:15 – 16:15	Joint Session: ICRP-MCC-Fund, MELODI + EURAMED Awards 15:15–15:25 <i>ICRP–Marie Claire Cantone Fund Speaker – Werner Rühm (ICRP)</i> 15:25–15:50 <i>MELODI Award</i> 15:50–16:15 <i>EURAMED Award</i>
16:15 – 17:00	Final Wrap-up & Take-Home Messages  <i>Key research & policy messages per platform · Convergences/divergences · Inputs for SRIA & future EU programming</i>
17:00	END
17:00 – 19:00	Pianoforte WP2 · ALLIANCE Internal Meeting