

**7th INTERNATIONAL FORUM ON ADVANCES OF RADIATION
PHYSICS (IFARP-7)
Buenos Aires 12-13 March 2026**

Thursday 12

Auditorium Benedetto Croce (Italian Cultural Institute)	
08:45	Participants Registration at the entrance of the Italian Cultural Institute
09:00	Opening Session Dott.ssa Giuliana Gentile (Italian Cultural Institute), Prof. Salvatore Barba (Scientific Attachè of the Italian Embassy in Buenos Aires), Prof. Jorge E. Fernandez (Alma Mater Studiorum University of Bologna and International Radiation Physics Society)
S01: Special Focus on Applications to Cultural Heritage and Art 1 (Chair Maria Pia Morigi)	
09:30	Non-invasive analysis of the palette of Antonio Berni in four paintings from 1931 to 1944 by portable X-ray fluorescence spectroscopy (pXRF) Marta Maier, Astrid Blanco Guerrero, Eugenia Tomasini and Gabriela Tomasini
09:50	A door to the past: X-Ray μ CT scan of an Egyptian animal mummy Nahuel Vega, Peter Zabala Medina and Faramarz Sahra Gard
10:10	Complementary application of radiative analytical techniques for the conservation of archaeological Josefina María Schweickardt, Marcia Bianchi Villelli and Pablo Daniel Pérez
10:30	Analytical Contributions in Restoration of "Los Capuchinos" Church's frieze, Córdoba, Argentina Marcela Mammana, Marcelo Rustán, Cazón Sofía, Verónica Shojjet and Alejandro Germanier
10:50	Coffee Break
S02: Applications to space, earth and environmental sciences (Chair Pablo Daniel Perez)	
11:20	Neutron production using the nuclear reaction $45\text{Sc}(p,n)45\text{Ti}$ driven by the 1.7 MV Tandem accelerator located at the Atomic Center Bariloche Pablo Daniel Pérez, Gustavo Ruano, Martín Pérez, Nestor Haberkorn, Sergio Suárez and Jerónimo Blostein
11:40	Atomic Signatures of the Cosmos: XPS Study of Meteorite Surfaces Faramarz Sahra Gard, Yamil Paz and Rogelio Daniel Acevedo
12:00	Preliminary Results of Erythrocytes Aggregation Parameters Under Gamma Radiation Exposure in Transfusion Medicine Sabrina Lorena Porini, Mariel Elisa Galassi and Horacio Castellini
12:20	Lunch Interval
S03: Processes in Radiation Physics (Chair Rafael Ferragut)	
13:40	An Extended-Range Approach to Energy-Dispersive Inelastic X-ray Scattering Spectroscopy: Fundamentals and First Results of EDIXS+ Francisco Romero Carena, Héctor Jorge Sánchez and Juan José Leani
14:00	Experimental setup for the formation of an intense positronium beam for gravitation experiments Alberto Galanti, Matias Nicolas Bayo, Rafael Omar Ferragut, Giuseppe Vinelli, Giuseppe Vinelli and Gabriele Rosi
14:20	Towards a Precision Measurement of the Antihydrogen Ground-State Hyperfine Constant at the ASACUSA Experiment Matias Bayo, Alberto Galanti, Rafael Ferragut and Marco Giammarchi
14:40	Positron annihilation lifetime spectroscopy applied to perovskite photovoltaic materials Abigail Williner, Silvia Tinte, Sergio Dalosto, Sandy Sánchez-Alonso, Rafael Ferragut and Javier Alejandro Schmidt
15:00	Coffee Break
S04: Simulation of Radiation Transport and Detection (Chair Sandro Manservisi)	

15:30	Carbon-ions irradiation: mean kinetic energy of the emitted electrons through H ₂ O	Nicolás Esponda, Roberto Rivarola, Michele Quinto and Juan Monti
15:50	Identification of Calcification Composition Using Conical Slits in X-ray Scattering Imaging (CS-XSI): A Simulation and Experimental Study	Carolina Moravec de Viana Borges, Renata Olmedo Benedet, Marcelo Goncalves Honnicke and Martin Eduardo Poletti
16:10	X-ray imaging with a phase sensitive detector	Marcelo Honnicke
16:30	Innovative ion-based radiotherapies: from interaction cross-sections to clinical applications	Mario Alcócer-Ávila and Mariel Elisa Galassi
16:50	Proton Stopping Power in Air: Inelastic Atomic Processes and Implications for Hadrontherapy Dosimetry	Camila Strubbia Mangiarelli, Veronica Belen Tessaro, Michael Beuve and Mariel Elisa Galassi
17:10	Monte Carlo-based simulations in a computational thyroid model: towards the implementation of dosimetric calculations	Venecia Magalí Calandrón, Luis Héctor Illanes and Cecilia Yamil Chain
17:30	Free time	
19:45	Social activity (not supported by the organizers)	

Friday 13

Aula Magna (Centro de Altos Estudios)		
S05: Special Focus on Applications to Cultural Heritage and Art 2 (Chair Marta Maier)		
9:00	Dual Energy Computed Tomography (DECT) for the characterization of heritage objects	Maria Pia Morigi, Nayyab Amjad, Matteo Bettuzzi, Patricia Guilló Vigo, Cecilia Riccardizi, Antonin Zajicek and Michal Vopálenký
9:20	Multianalytical identification of an atypical green pigment in late pre-Hispanic rock art from Inca Cueva, Northwestern Argentina	Matias Landino, Eugenia Ahets Etcheberry, Lucas Gheco, Marcos Tascon, Diego G. Lamas and Fernando Marte
9:40	Archaeometric study of ceramic production at the Ventarrón–Collud Archaeological Complex, Peru	Cheila Sumenssi de Araujo Desanti, Carlos R. Appoloni, Renato Ikeoka, Arcuri, Fagundes, Silva, Lopes, Silva and Samulewski
10:00	Multianalytical characterization of an Ary Brizzi easel painting	Carolina Sanchez Barberena, Astrid Blanco Guerrero, Pino Monkes, Alejandra Fazio and Marta Maier
10:20	Fluorescence-based and multitechnique spectroscopy for the non-invasive analysis of small-format printed objects	Cecilia Angulo Valdivia, María Gabriela Lagorio and Eugenia Tomasini
10:40	Accessible strategies for optimizing X-ray fluorescence measurements on paper-based heritage objects	Fermina Valeria Ziaurriz and Eugenia Paula Tomasini
11:00	Coffee Break	
S06: Quantitative X-ray and Particle Analytical Techniques (Chair Burkhard Beckhoff)		
11:30	Full theoretical modeling of inner-shell ionization, applications in cultural heritage and material technology	Claudia Montanari, Darío Mitnik and Jorge Miraglia
11:50	Operando chemical analysis of batteries by quantitative x-ray spectrometry	B. Beckhoff, K. Frenzel, G. Greco and S. Brutti
12:10	Multi-elemental X-ray fluorescence computed tomography: sub-millimetric mapping of samples containing Ag and Gd	Nicolás Eugenio Martín, Carolina Salinas Domjan, Miguel Sofo Haro and Mauro Valente
12:30	Radiation-enabled 3D visualisation of diagenetic processes in Permian silicified wood from the Carapacha Basin, Argentina	Enrique Baez, Alejandro Germanier and Alexandra Crisafulli

12:50	Analysis of Metals in Biological Fluids Deposited on Paper Filters by X-Ray Fluorescence	Martina Brué, Juan José Leani, Héctor Jorge Sánchez and Roberto Daniel Perez
13:10	Lunch Interval	
	S07: Medical Radiation Protection and Dosimetry (Chair Francesco Teodori)	
14:30	Radiation Protection and Dosimetry Topics in the Novel Applications of Radiopharmaceuticals in Medicine	Pedro Vaz
14:50	Neutron thermalization and gamma spectrometry for neutron activation with Am-Be sources: A FLUKA Monte Carlo approach	Carolina Salinas Domján, Alejandro Ferreira, Miguel Sofo Haro and Mauro Valente
15:10	Exploring the potential use of steelworks waste as radiation shielding	Laura Damonte, Ma. del Carmen Menendez, Ma. Victoria Gallegos and Ma. Agustina Corti
15:30	Establishment of Diagnostic Reference Levels for Pediatric Interventional Cardiology Procedures Based on Procedural Complexity	Hugo Schelin, Akemi Yagui, Gabriel Martins, Eloisa Carneiro, Sergei Paschuk, Valeriy Denyak, Edney Milhoretto, Paula Vosiak, Adriano Legnani and Carlos Ubeda
15:50	Optimization of Image Quality and Radiation Dose in Flat Panel Digital Radiography	Hugo Schelin, Akemi Yagui, Rosiane Mello, Laura Ruckel, Priscila Castilho, Sergei Paschuk, Valeriy Denyak, Paula Vosiak and Adriano Legnani
16:10	Development and Clinical Dosimetric Validation of a MATLAB-Based Tool for Total Body Irradiation	Clara Lucia Latour, Victor Palacios and Ramiro Cufre
16:30	Coffee Break	
	S08: Applications in Medicine and Biology (Chair Pedro Vaz)	
17:00	Low-Energy Antimatter Spectroscopy of Biological Samples: Wet Chamber Design and Dosimetry	Matteo Vicini, Rafael Ferragut, Paola Folegati and Claudio Conci
17:20	Scattered Radiation Intensity in Digital Mammography and Its Reduction Using Anti Scatter Grids	Laura Alcântara Silva Lopes, Bruno Beraldo Oliveira, Renato França Caron, Valdair Francisco Muglia and Martin Eduardo Poletti
17:40	Analysis of Radiation Doses in Conventional Pediatric Radiographs: Correlation between Clinical Justification, Repetitions, and Exposure	Paula Vosiak, Hugo Schelin, Akemi Yagui, Rosiane Mello, Priscila Resmer, Sergei Paschuk, Adriano Legnani and Viviane Asfora
18:00	From Transfusion Units to Radiotherapy: Characterizing Membrane Damage and Pore Formation in Irradiated Red Blood Cells via SEM	Maria Candela Della Rosa, Vanina Tartalini, Analia Ines Alet, Sabrina Porini, Guillermo Moschini, Ariel Aresi, Liliana Di Tullio, Nestor Manzelli, Andrea Acosta, Martina Avalos and Mariel Elisa Galassi
18:20	DOSIMETRIC CHARACTERIZATION OF AN ALPHA SOURCE FOR CELLULAR IRRADIATIONS	Maria Candela Della Rosa, Violette Guittet, Gustave Garde, Yannick Zoccarato, Mariel Elisa Galassi, Michael Beuve and Etienne Testa
18:40	Closing Remarks	

19:00