

# MONDAY, 13. 9. 2021 | Applied Nuclear Physics Conference 2021, Preliminary program

Sunday		12.09.2021	
17:40 - 20:00		Welcome drink	
Monday		13.09.2021	
08:40 - 09:00		Opening - Gočár Hall	
09:00 - 09:40	Plenary talk	Marco Durante	APPLIED NUCLEAR PHYSICS AT NEW PARTICLE ACCELERATORS
09:40 - 10:10	Invited talk	Lyudmila Goncharova	ION BEAM MODIFICATION FOR Si PHOTONICS
10:10 - 10:20			2020 IBA - Europhysics Prize - Iva Bogdanovic Radovic
10:20 - 10:40	Invited talk	Thomas Haberer IBA winner 2020	Ion-Beam Therapy at HIT: Options for Multi-Ion Treatment and Research
10:40 - 11:00		Coffee break	
Gočár Hall		Janák Hall	
Session A - Nuclear Physics in Medicine Session Chair: Katia Parodi		Session B - Ion Beam Analytical Methods in Material Science Session Chair: Anna Mackova	
11:00 - 11:30	Invited talk	Sandro Rossi	Hadrontherapy: physics meets oncology in the fight against cancer
11:30 - 11:50	Talk	Sofia Colombi	NUCLEAR FRAGMENTATION STUDIES FOR HADRON THERAPY AND SPACE RADIATION PROTECTION WITH THE FOOT EXPERIMENT
11:50 - 12:10	Talk	Jorge Lereendegui-Marco	SIMULTANEOUS NEUTRON AND GAMMA IMAGING SYSTEM FOR REAL TIME RANGE AND DOSE MONITORING IN HADRON THERAPY AND OTHER APPLICATIONS
12:10 - 12:30	Talk	Consuelo Guardiola	MICRODOSIMETRY MEASUREMENTS OF LOW ENERGY PROTONS WITH NEW SILICON 3D-MICRODETECTORS
12:30 - 13:40		Lunch	
Session C - Nuclear Physics in Medicine Session Chair:		Session D - Ion Beam Analytical Methods in Material Science Session Chair: Iva Bogdanovic Radovic	
13:40 - 14:10	Invited talk	Thomas Cocolios	Novel radioisotopes for medical applications: the CERN MEDICIS project and beyond
14:10 - 14:30	Talk	Alessandro Colombi	IMPROVEMENT OF NUCLEAR REACTION MODELING FOR THE PRODUCTION OF <sup>47</sup> Sc ON NATURAL VANADIUM TARGETS FOR MEDICAL APPLICATIONS
14:30 - 14:50	Talk	Francesca Barbaro	THEORETICAL STUDY OF <sup>47</sup> Sc PRODUCTION FOR THERANOSTIC APPLICATIONS USING PROTON BEAMS ON ENRICHED TITANIUM TARGETS
14:50 - 15:10	Talk	Jake Johnson	<sup>225</sup> Ac: From target to test tube to tumor. Developments on how much <sup>225</sup> Ac can be obtained by the ISOL technique.
15:10 - 15:30		Coffee break	
Session E - Nuclear Physics in Medicine Session Chair: Iva Ambrožová		Session F - Ion Beam Analytical Methods in Material Science Session Chair: Daniel Primetzhofner	
15:30 - 16:00	Invited talk	Katia Parodi	Nuclear physics for reduction of range uncertainties in clinical and preclinical applications of ion beams
16:00 - 16:20	Talk	Diana Bachiller-Perea	FIRST IN SITU 2D-MICRODOSIMETRY MAPS AT A PROTON THERAPY CENTER WITH NOVEL SILICON 3D-MICRODETECTORS
16:20 - 16:40	Talk	Vahagn Ivanyan	Geant4 study of an appropriate neutron flux achievement for BNCT
16:40 - 17:00	Talk	Gaia Dellepiane	New methods for theranostic radioisotope production with solid targets at the Bern medical cyclotron
17:00 - 17:20	Talk	Giuseppe Lorusso	Study of the internal pair production decay of the 0 <sup>+</sup> excited state in <sup>90</sup> Zr by magnetic spectrometry
15:30 - 16:00	Invited talk	Lyudmila Goncharova	ION BEAM MODIFICATION FOR Si PHOTONICS
16:00 - 16:30	Invited talk	Maria del Carmen Jiménez Ramos	IBIC MICROSCOPY FOR SEMICONDUCTOR DETECTORS RESEARCH
16:30 - 16:50	Talk	Peter Bauer	Demands and challenges for Stopping Power tabulations
16:50 - 17:10	Talk	Svenja Lohmann	Trajectory-dependent electronic excitations of keV ions
17:10 - 17:30	Talk	Václav Olšanský	Proton radiography using the Timepix3 pixel detector applied at Tandetron

# TUESDAY, 14. 9. 2021 | Applied Nuclear Physics Conference 2021, Preliminary program

Tuesday		14.09.2021	
<b>Gočár Hall</b>			
09:00 - 09:40	Plenary talk	Andre Vantomme	Recent achievements – and challenges – in ion beam analysis for materials characterization
09:40 - 10:20	Plenary talk	Chiara Latessa	Paradigm shifting of microdosimetry in particle therapy
10:20 - 10:50	Invited talk	Marie Davidíková	LET SPECTROMETRY IN RADIOTHERAPY AND RADIATION PROTECTION
<b>10:50 - 11:10 Coffee break</b>			
<b>Gočár Hall</b>		<b>Janák Hall</b>	
<b>Session A - Nuclear Physics in Medicine</b>		<b>Session B - Ion and Neutron Beam Irradiation of Materials</b>	
<b>Session Chair: Thomas Haberer</b>		<b>Session Chair: Juha Muhonen</b>	
11:10 - 11:30	Talk	Gaia Franciosini	MONDO: A scintillating fibre tracker for secondary neutron measurements in Particle Therapy
11:30 - 11:50	Talk	Katrin Schnürle	Development of integration mode proton imaging with a single CMOS detector for a small animal irradiation platform
11:50 - 12:10	Talk	Ilaria Mattei	Development of integration mode proton imaging with a single CMOS detector for a small animal irradiation platform
12:10 - 12:30	Talk	Mario Pietro Carante	A NEW NUCLEAR REACTION ROUTE TO PRODUCE 52g Mn WITH HIGH PURITY FOR MULTI-MODAL IMAGING
12:30 - 12:50	Talk	José Antonio Briz Monago	Testing a pCT scanner prototype
<b>11:10 - 11:40 Invited talk Richard A. Wilhelm Highly charged ion interaction with surfaces</b>			
11:40 - 12:00	Talk	Pavo Dubcek	ROLE OF THE SURFACE IN THE ION TRACK FORMATION IN Al <sub>2</sub> O <sub>3</sub> AND MgO
12:00 - 12:20	Talk	Alexander Azarov	Radiation defect dynamics in beta Ga <sub>2</sub> O <sub>3</sub> : ion flux vs irradiation
12:20 - 12:50	Talk	Amer Al-Qaad	RECENT CALCULATIONS FOR D <sub>2</sub> O MODERATED <sup>252</sup> Cf REFERENCE FIELDS AT PTB
12:30 - 12:50	Talk	Oleksandr Romanenko	One-step 3D microstructuring of PMMA using MeV light ions
<b>12:50 - 13:50 Lunch</b>			
<b>Session C - Nuclear Physics in Medicine</b>		<b>Session D - Ion and Neutron Beam Irradiation of Materials</b>	
<b>Session Chair: Federico Picollo</b>		<b>Session Chair: Alexander Azarov</b>	
13:50 - 14:20	Invited talk	Pavol Rajec	RECENT TRENDS IN DEVELOPMENT OF PET RADIOPHARMACEUTICALS FOR NUCLEAR MEDICINE
14:20 - 14:40	Talk	Iva Ambrožová	METROLOGY FOR ADVANCED RADIOTHERAPY USING PARTICLE BEAMS WITH ULTRA-HIGH PULSE DOSE: TEST IN FLASH-LIKE ELECTRON BEAM AT MICROTRON MT 25
14:40 - 15:00	Talk	Gaia Franciosini	Inter-fractional monitoring in Particle Therapy treatments with <sup>12</sup> C ions exploiting the detection of secondary particles
15:00 - 15:20	Talk	María Teresa Rodríguez González	MEASUREMENT OF THE PRODUCTION CROSS SECTION OF β+ EMITTERS FOR RANGE VERIFICATION IN PROTON THERAPY
<b>13:50 - 14:20 Invited talk Aurélie Gentils NUCLEAR MATERIALS AND ION IRRADIATION STUDIES USING THE JANNUS-ORSAY IN SITU DUAL ION BEAM TRANSMISSION ELECTRON MICROSCOPE</b>			
14:40 - 15:00	Talk	Gihan Veliša	Response of defective KTaO <sub>3</sub> to ionizing ion irradiation
15:00 - 15:20	Talk	Daniele Torsello	Effects of ion irradiation on iron based superconductors analyzed by a microwave technique
<b>15:20 - 15:40 Coffee break</b>			
<b>Session E - Nuclear Physics in Medicine</b>		<b>Session F - Special session - iThemba lab</b>	
<b>Session Chair: Thomas Cocolios</b>		<b>Session Chair: Pavol Noga</b>	
15:40 - 16:00	Talk	Micol De Simoni	Data-driven model of carbon ion fragmentation in a fast MC code (FRED) for treatment planning system
16:00 - 16:20	Talk	Luca Menzio	Developing a portable device sensible to photons and neutrons: the SICURA project
16:20 - 16:40	Talk	Vladimir Zverev	Novel Generators for Nuclear Medicine: Technical and Antitumor Characteristics
16:50 - 17:10	Talk	Matthias Würfl	High-Z Metal (Oxide) Nanoparticles for Contrast Enhancement in Proton Imaging at a Small Animal Irradiation Platform
17:10 - 17:30	Talk	Huseyin Ozan Tekin	RADIATION SHIELDING PROPERTIES OF PbO–Bi <sub>2</sub> O <sub>3</sub> –B <sub>2</sub> O <sub>3</sub> –Al(PO <sub>3</sub> ) <sub>3</sub> GLASSES AGAINST DIAGNOSTIC AND THERAPEUTIC NUCLEAR MEDICINE ENERGIES
15:40 - 16:10	Invited talk	Peane Maleka (iThemba)	Unique High Energy Neutron Beams at iThemba LABS
16:10 - 16:40	Invited talk	Stephan Woodborne (iThemba)	DEVELOPMENT AND APPLICATION OF THE FIRST AMS FACILITY IN AFRICA
16:40 - 17:00	Talk	Chidiebere Obasi	EFFECT OF GAMMA RADIATION ON THE MORPHOLOGICAL AND OPTICAL PROPERTIES OF COPPER ZINC TIN SULPHIDE (Cu <sub>2</sub> ZnSnS <sub>4</sub> ) THIN FILMS
17:00 - 17:20	Talk	Tanya Hutton	Elemental analysis of concrete via fast neutron transmission and scattering spectrometry
17:20 - 17:40	Talk	Mandla Msimanga (iThemba)	Experimental ion beam - matter interaction parameters at 0.1 MeV/u – 1.0 MeV/u energies for heavy ion nuclear analytical techniques
17:40 - 18:10	Rapid fire poster session (online)		
<b>18:10 - 20:00 Exhibition companies and infrastructure/Poster session 1 - Nuclear Physics in Medicine, Ion and Neutron Beam Irradiation of Materials and iThemba lab posters</b>			

# WEDNESDAY, 15. 9. 2021 | Applied Nuclear Physics Conference 2021, Preliminary program

Wednesday 15.09.2021

Gočár Hall										
09:00 - 09:40	Plenary talk	Katharina Lorenz	ION IMPLANTATION AND RADIATION EFFECTS IN GROUP III NITRIDE SEMICONDUCTORS							
09:40 - 10:10	Invited talk	Juha Muhonen	Silicon quantum technologies with implanted donors							
10:10 - 10:40	Invited talk	Federico Picollo	ION BEAM MODIFICATION OF DIAMOND FOR BIOSENSING							
10:40 - 11:00 Coffee break										
Gočár Hall					Janák Hall					
Session A - Nuclear Physics in Medicine Session Chair: Marie Davidkova					Session B - Ion and Neutron Beam Irradiation of Materials Session Chair: Richard A. Wilhelm					
11:00 - 11:20	Talk	Alberto Boso	AUGER ELECTRON SPECTROSCOPY STUDIES AT THE NATIONAL PHYSICAL LABORATORY FOR MEDICAL APPLICATIONS	UK	11:00 - 11:20	Talk	Nikita Fedorov	DEVELOPMENT OF THE TAGGED NEUTRON METHOD FOR ELEMENTAL ANALYSIS AND NUCLEAR REACTION STUDIES – THE TANGRA PROJECT	online	
11:20 - 11:40	Talk	Maria Cristina Montesi	Measurement of the fragmentation cross-section of Oxygen ions on carbon and polyethylene targets with the emulsion spectrometer		11:40 - 12:00	Talk	Radel Gimaev	Neutron Radiation Analysis for Predicting Rare Earth Elements in Rock Samples	online	
11:40 - 12:00	Talk	Javier Balibrea Correa	First in-beam tests on simultaneous PET and Compton imaging aimed at quasi-real-time range verification in hadron therapy							
12:00 - 12:20	Talk	Elisa Fiorina	CLINICAL RESULTS OF IN-VIVO INTER-FRACTIONAL MONITORING IN PARTICLE THERAPY BY MEANS OF THE INSIDE IN-BEAM PET							
12:20 - 13:40 Lunch										
13:40 - 14:20 Exhibition companies and infrastructure										
14:20 - 20:00 OUTING/SOCIAL PROGRAM										

# THURSDAY, 16. 9. 2021 | Applied Nuclear Physics Conference 2021, Preliminary program

Thursday 16.09.2021									
<b>Gočár Hall</b>									
09:00 - 09:40	Plenary talk	Mariaelena Fedi	Small accelerators for cultural heritage - analytical capabilities and historical overview						
09:40 - 10:10	Invited talk	Lucille Beck	IBA and AMS techniques for Cultural Heritage studies						
10:10 - 10:40	Invited talk	Alan Owens	SEMICONDUCTOR MATERIALS FOR RADIATION DETECTION – CURRENT STATUS AND AND FUTURE DEVELOPMENT						
<b>10:40 - 11:00 Coffee break</b>									
<b>Gočár Hall</b>					<b>Janák Hall</b>				
<b>Session A - Nuclear Physics for Energy and Space Technologies</b>					<b>Session B - Nuclear Physics for Cultural Heritage and Environment</b>				
<b>Session Chair: Katharina Lorenz</b>					<b>Session Chair: Jan Kučera</b>				
11:00 - 11:30	Invited talk	Marek Rubel	Ion Beam Analysis in Studies of First Wall Materials in Controlled Fusion Devices		11:00 - 11:20	Talk	Giles Edwards	Development of Novel Instrumentation for Matrix Independent Ultra-trace Detection and Quantitation of Radionuclides using Colinear Resonance Ionisation Spectroscopy	UK
11:30 - 11:50	Talk	Martin Kákona	CALIBRATION CHALLENGES OF PIN DIODE SILICON DETECTOR		11:20 - 11:40	Talk	Igor Izosimov	TRACE ANALYSIS OF RADIONUCLIDES BY USING MASS SPECTROMETRY AND LASER SPECTROSCOPY	online
11:50 - 12:10	Talk	Simone Amaducci	PERFORMANCES OF A COMPACT NEUTRON DETECTOR USING HIGH PURITY <sup>10</sup> B-ENRICHED PLD GROWTH FILMS		11:40 - 12:00	Talk	Antonella Scherillo	New set-up for Neutron Resonance Capture Analysis (NRCA) and Neutron Resonance Transmission Imaging (NRTI) on INES at ISIS	UK
12:10 - 12:30	Talk	Francesco Di Capua	Real time dosimetry with radio-chromic films		12:00 - 12:20	Talk	Holly Perrett	Development of a photoionisation mass spectrometer for measurement of <sup>85</sup> Kr	UK
					12:20 - 12:40	Talk	Nthabiseng Mohlala	Radioactivity assessment of Uranium Isotopes concentration in water sources at former Uranium mines in the West-Rand area	online
<b>12:30 - 13:40 Lunch</b>									
<b>Session C - Nuclear Physics for Energy and Space Technologies</b>					<b>Session D - Nuclear Physics for Cultural Heritage and Environment</b>				
<b>Session Chair: Marek Rubel</b>					<b>Session Chair: Rene Heller</b>				
13:40 - 14:10	Invited talk	Maelle Kerveno	NEW CHALLENGES FOR EXPERIMENTAL DATA DEDICATED TO REACTOR PHYSICS		13:40 - 14:10	Invited talk	Ljudmila Benedik	Application of NAA in Environmental Research	
14:10 - 14:30	Talk	Wojciech Krolas	Facilities for complementary physics experiments at the IFMIF-DONES fusion neutron source		14:10 - 14:30	Talk	Inci Karakas	NATURAL RADIOACTIVITY AND IMPORTANCE FOR SOIL: A REVIEW ON CRITICAL FINDINGS IN TURKEY	online
14:30 - 14:50	Talk	Moritz Kütt	Applied Nuclear Physics for the Verification of Nuclear Weapons Disarmament		14:30 - 14:50	Talk	Darcy van Eerten	Non-destructive mass spectrometry of single hot particles from the Chernobyl exclusion zone by resonant laser SNMS	
14:50 - 15:10	Talk	Ricardo Luis Ramos	EXTENSION OF THE BIANCA BIOPHYSICAL MODEL UP TO Fe-IONS AND APPLICATIONS FOR SPACE RADIATION RESEARCH		14:50 - 15:10	Talk	Sofia KOLOVI	Radiation exposure of microorganisms living in radioactive mineral spring	
<b>15:10 - 15:30 Coffee break</b>									
<b>15:30 - 15:50 Rapid fire poster session (online)</b>									
<b>16:00 - 18:00 Exhibition companies and infrastructure/Poster session 2 - Ion Beam Analytical Methods in Material Science, Nuclear Physics for Energy and Space Technologies and Nuclear Physics for Cultural Heritage and Environment</b>									
<b>18:00 - 20:00 Prague excursion</b>									
<b>20:00 Conference dinner</b>									

# FRIDAY, 17. 9. 2021 | Applied Nuclear Physics Conference 2021, Preliminary program

Friday 17.09.2021

## Gočár Hall

09:00 - 09:30	Invited talk	Massimo Chiari	NUCLEAR PHYSICS FOR THE ENVIRONMENT AND CULTURAL HERITAGE: THE LABEC EXPERIENCE	on line
09:30 - 10:00	Invited talk	Jan Kučera	RECENT ACHIEVEMENTS IN NAA, PAA, IBA, AND AMS APPLICATION FOR CULTURAL HERITAGE INVESTIGATIONS	
10:00 - 10:20	Talk	Maxim Karetnikov	GENERATORS OF TAGGED NEUTRONS AND THEIR APPLICATIONS	online

10:20 - 10:40 Coffee break

## Gočár Hall

## Janák Hall

### Session A - Nuclear Physics for Cultural Heritage and Environment

### Session B - Nuclear Physics for Energy and Space Technologies

Session Chair: Ljudmila Benedek

Session Chair: Maelle Kerveno

10:40 - 11:00	talk	Ayabulela Tsewu	HEALTH EFFECTS OF RADIUM IN WATER SOURCES AROUND FORMER URANIUM MINES, WEST-RAND JOHANNESBURG.	online	10:40 - 11:10	Invited talk	Raquel González Arrabal	PLASMA FACING MATERIALS FOR INERTIAL CONFINEMENT NUCLEAR FUSION REACTORS
11:00 - 11:20	talk	Anna Fedrigo	ELEMENTAL AND PHASE MAPPING OF SWORD FRAGMENTS FROM 2nd–1st CENTURY BCE CHINA	UK	11:10 - 11:30	Talk	Miroslav Zbořil	EXPERIMENTAL STUDY OF SPACE RADIATION SHIELDING MATERIALS: MEASUREMENT OF SECONDARY RADIATION BEHIND THICK SHIELDING AND ASSESSMENT OF ITS RADIOBIOLOGICAL EFFECT
11:20 - 11:40	talk	Matea Krmpotić	Studying UV Ageing Effects ni Modern Artists' Paints with MeV-SIMS		11:30 - 11:50	Talk	Alice Manna	Measurement of the $^{235}\text{U}(n,f)$ cross section relative to n-p scattering up to 500 MeV at the n TOF facility at CERN
11:40 - 12:00	talk	Miroslav Jeřkovský	Recent developments in IBA analysis at CENTA, Bratislava					

11:50 - 13:00 Lunch

Closing

# TUESDAY, 14. 9. 2021 | POSTER SESSION

Thursday 14.09.2021

## Poster section 1 (Tue 09/14) - Nuclear Physics in medicine, Ion and Neutron Beam Irradiation of Materials

Surname	Name	Contribution name
Alexa	Petr	AN OPTIMIZED DT-NEUTRON GENERATOR IRRADIATION FACILITY FOR PROMPT NEUTRON ACTIVATION ANALYSIS OF LIGHT ELEMENTS
Azarov	Alexander	ENERGETICS, MIGRATION AND TRAPPING OF Zn INTERSTITIALS IN ION IMPLANTED ZnO
Bachiller-Perea	Diana	STUDY OF THE CHARGE COLLECTION EFFICIENCY IN NOVEL SILICON 3D-DETECTORS FOR MICRODOSIMETRY
Gonsalves	Basil	Stopping force of diamond like carbon and silicon nitride for beryllium and boron ions
Hanžek	Juraj	Ion track formation in sapphire studied by sequential swift heavy ion irradiation
Iveković	Damjan	Energy retention in swift heavy ion irradiated thin films
Mackova	Anna	ZnO nano-pillars decorated with Au nanoparticles prepared by ion beam implantation
Malinsky	Petr	GO and polymer micro-capacitors prepared by ion beam
Mikšová	Romana	The structural and optical response of the Au nanoparticles embedded in YSZ modified using high energetic ion irradiation
Noga	Pavol	PLASMA IMMERSION ION IMPLANTATION INDUCED SURFACE PATTERNING
Ferenčík	Filip	ION BEAM SYNTHESIS OF HIGH OXIDATION STATE PALLADIUM OXIDE NANOPARTICLES
Ntemou	Eleni	ASSESSING ELECTRONIC EXCITATIONS IN SINGLECRYSTALLINE SIC FOILS BY KEV IONS
Rodriguez Ramos	Mauricio	CAPABILITIES OF THE ION BEAM MICROPROBE IN THE STUDY OF DIFFERENT POLARIZATION QUENCHING TECHNIQUES APPLIED TO SC-CVD DETECTORS
Shams-Latifi	Jila	IN-SITU TOF-LEIS STUDY OF TUNGSTEN SURFACE ENRICHMENT IN EUROFER97 BY ANNEALING TO ELEVATED TEMPERATURES
Stepanovska	Eva	Properties of polyamide 6 and polyvinylidene fluoride nanofibers irradiated using C and H ions
Ström	Petter	Irradiation of (111)-CaF <sub>2</sub> using a modernized beamline in Uppsala
Ström	Petter	Charge state dependence of the damage onset depth in selfirradiated Ge
Strunga	Vladimír	Experimental alpha-particle modifications of the natural resins.
Tomič Luketić	Kristina	RAMAN SPECTROSCOPY INVESTIGATION AND MOLECULAR DYNAMICS SIMULATIONS OF ION TRACKS IN GRAPHENE
Cartechini	Giorgio	Enhancing gamma production for online dose verification in proton therapy
Lyadov	Nikolay	online PHOTOLUMINESCENCE AND EPR STUDIES OF SINGLE DIAMONDS WITH GeV-COLOR CENTERS FORMED BY ION IMPLANTATION
Lyadov	Nikolay	online OPTICAL PARAMETERS STUDY OF AMORPHOUS GERMANIUM ( $\alpha$ -Ge) BY SPECTRAL ELLIPSOMETRY
Smith	Richard	on line ERD AND RBS OF H, D, C AND O IN POLYMER THIN FILMS
Ajani	Mistura Bolaji	online Investigating a potential health risk due to radiation from samples collected in Chad
Mtshali	Christopher	online MICRO PROTON INDUCED X-RAY EMISSION SPECTROSCOPY APPLICATION IN ENVIRONMENTAL STUDIES
Vandevoorde	Charlot	online A ground-based evaluation of the impact of neutron dose rate on health effects during space travel

## Rapid fire poster session (Tue 09/14) - Nuclear Physics in medicine, Ion and Neutron Beam Irradiation of Materials

Surname	Name	Contribution name
17:40 - 17:45	Ajani	Mistura Bolaji online Investigating a potential health risk due to radiation from samples collected in Chad
17:45 - 17:50	Lyadov	Nikolay online PHOTOLUMINESCENCE AND EPR STUDIES OF SINGLE DIAMONDS WITH GeV-COLOR CENTERS FORMED BY ION IMPLANTATION
17:50 - 17:55	Lyadov	Nikolay online OPTICAL PARAMETERS STUDY OF AMORPHOUS GERMANIUM ( $\alpha$ -Ge) BY SPECTRAL ELLIPSOMETRY
17:55 - 18:00	Mtshali	Christopher online MICRO PROTON INDUCED X-RAY EMISSION SPECTROSCOPY APPLICATION IN ENVIRONMENTAL STUDIES
18:00 - 18:05	Vandevoorde	Charlot online A ground-based evaluation of the impact of neutron dose rate on health effects during space travel
18.05 -18.10	Smith	Richard on line ERD AND RBS OF H, D, C AND O IN POLYMER THIN FILMS

iThemba

Heritage

iThemba

Heritage

iThemba

Medicine

# THURSDAY 16. 9. 2021 | POSTER SESSION

Thursday 16.09.2021

## Poster section 2 (Thu 09/16) - Nuclear Physics in Environment and Cultural Heritage, Nuclear Physics for Energy and Space Technologies, IBA in Material Science

Surname	Name	Contribution name
Boussahoul	Fares	High solid angle RBS detection of heavy elements with low concentrations in silicon
Cosic	Donny	Development of diamond based cryogenic neutron detectors for nuclear fusion applications
Cutroneo	Mariapompea	PULSED LASER DEPOSITION OF THIN FILMS ON POLYDIMETHYLSILOXANE FOR BIOMEDICAL APPLICATION
Duggan	Matthew	UK Identification of $^{90}\text{Sr}$ in environmental samples via the hyphenation of ICP-MS with Collinear Resonance Ionisation Spectroscopy
Jagerová	Adéla	The synthesis of Au-NPs by energetic ion implantation into the crystalline GaN and characterisation of their optical properties
Komander	Kristina	Hydrogen storage on the nanoscale: visualizing interstitial hydrogen in nanostructured metals with MeV ion beams
MARCUCCI	GIULIA	NON-DESTRUCTIVE TECHNIQUES APPLIED TO THE CHARACTERIZATION OF ANCIENT GLASS MOSAIC TESSERAE
Moldarev	Dmitrii	Studying oxygen mobility in photochromic yttrium oxy-hydride films by isotopic labelling
Respaldiza	Miguel A.	Gamma ray transmission technique with a barium source for the study of copper-based archaeological objects
Sottili	Leandro	Development of a compact X-ray multi-technique device for cultural heritage applications
Wolf	Philipp Mika	IN-SITU CHARACTERIZATION OF ULTRA-THIN NICKEL SILICIDE FILMS USING LOW ENERGY ION SCATTERING
Wolf	Philipp Mika	CHARACTERIZATION OF TITANIUM ALUMINUM NITRIDE FILMS USING LOW ENERGY ION SCATTERING
DARARUTANA	PISUTTI	online X-RAY SPECTROSCOPY STUDY ON THAI AMULET: PHRA KRU NADUNE
Grozdanov	Dimitar	online PROMPT-GAMMA NEUTRON ACTIVATION ANALYSIS and DETERMINING THE MOISTURE CONTENT with SCINTILLATION GAMMA-DETECTOR AND A $^{239}\text{Pu}$ -Be
HOANG	Sy Minh Tuan	online PRECISE DETERMINATION OF U235 AND RA-226 PHOTOPEAK INTENSITIES IN NATURALLY OCCURRING RADIOACTIVE MATERIALS USING OPTIMIZATION
Tatarinova	Alisa	online Application of the Rutherford Backscattering Method in Powder Nanotechnology

## Rapid fire poster session (Tue 09/16) - Nuclear Physics in Environment and Cultural Heritage, Nuclear Physics for Energy and Space Technologies, IBA in Material Science

Surname	Name	Contribution name
15:30 - 15:35	DARARUTANA	PISUTTI online X-RAY SPECTROSCOPY STUDY ON THAI AMULET: PHRA KRU NADUNE
15:35 - 15:40	HOANG	Sy Minh Tuan online PRECISE DETERMINATION OF U235 AND RA-226 PHOTOPEAK INTENSITIES IN NATURALLY OCCURRING RADIOACTIVE MATERIALS USING OPTIMIZATION
15:40 - 15:45	Tatarinova	Alisa online Application of the Rutherford Backscattering Method in Powder Nanotechnology