		Saturday, 11 March	2023	
		Pedagogical University of Kra	kow, Poland	
All day	Arrivals			
15.00 – 19.00	Pedagogical Universi Address: ul. Podchorą	RATION ity of Krakow, Poland żych 2, 30-084 Kraków n : 118		participants and Competition Finalists - Submission of printed poster designs
		Sunday, 12 March		
Pedagogical University of Krakow, Poland   8.30 + REGISTRATIONS (ROOM 118): For Conference participants and competition finalists.   MATH & SCIENCE Poster COMPETITION Submission of printed designs				
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops
Coordinators	Tomasz Szemberg, Joanna Markowicz	Mirosława Sajka, Agnieszka Kowalska	Paulina Wiśniewska, Daniel Wójcik	Thomas Economou, Elpi Margariti
09:30 – 09:45	MP1 RATIONAL NUMBERS IN ARCHITECTURE AND CONSTRUCTION Amadea Filipović OŠ Braća Radić, Koprivnica, Croatia	MP51 <b>THE RAMANUJAN SUMMATION</b> Stephanie Antoniou, Marian Rostandi The Senior School, Nicosia, Cyprus	SP1 BERMUDA TRIANGLE Yali Vaknin, Gracie Chalhoub, Andreana Zardi, Rafaella Charalambous Med High Private English School, Larnaca, Cyprus	STEAME2 OPEN-ENDED PROBLEMS FOR EMPOWERING STUDENTS THINKING AND UNDERSTANDING <u>Valentina Gogovska,</u> UKIM University, Faculty of Natural Sciences and Mathematics-Skopje, Institute of Mathematics
09:45 – 10:00	MP2 <b>MATHEMATICS AND FOOTBALL</b> Leona Salajpal Osnovna skola,,Braca Radic, Koprivnica,Croatia	MP52 <b>BREAKFAST PROBLEMS</b> Stephanos Artemis The Senior School, Nicosia, Cyprus	SP2 <b>NEURALINK</b> Naomi Gerber Med High Private English School, Larnaca, Cyprus	STEAME3 ENGLISH, KITES AND STEAME SKILLS <u>Daniela Florescu</u> , Liceul Teoretic Tudor Arghezi, Craiova, Romania

Sunday, 12 March 2023 Pedagogical University of Krakow, Poland				
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops
Coordinators	Tomasz Szemberg, Joanna Markowicz	Mirosława Sajka, Agnieszka Kowalska	Paulina Wiśniewska, Daniel Wójcik	Thomas Economou, Elpi Margariti
10:00 – 10:15	MP3 <b>INFLATION</b> Marija Švegović Udruga mladih koprivničkih matematičara, Croatia	MP53 <b>FINDING PRIME NUMBERS</b> Michalis Gonatas The Senior School, Nicosia, Cyprus	SP3 <b>PERFECT FREQUENCY</b> Marina Mavros Med High Private English School, Larnaca, Cyprus	WS1 (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT *DEUTSCHMANN Bernd, **MAIER Christoph, **JUCH Nikolaus** **TU-Graz, Head of Institute, **TU-Graz, Master Student, ***TU-Graz, Bachelor Student, Austria
10:15 – 10:30	MP4 <b>MATH IN ASTRONOMY</b> Antea Jelović OŠ Braća Radić, Koprivnica, Croatia	MP54 <b>OPTIMAL STOPPING THEORY</b> Raphael Son Ikossi Le The Senior School, Nicosia, Cyprus	SP4 <b>TESLA MODEL 3</b> Dariia Khudobiak, Olga Georgiou, Maria Gryshko, Maria Karevina Med High Private English School, Larnaca, Cyprus	WS1 (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT
10:30 – 10:45	MP5 <b>MATHEMATICS IN HISTORY</b> Juraj Ašić Osnovna skola "Braca Radic", Koprivnica,Croatia	MP55 <b>GUILTY OR NOT, MATH NEVER LIES</b> Nicolina Christodoulou The Senior School, Nicosia, Cyprus	SP5 <b>GUT BACTERIA</b> Destine Akokcu Med High Private English School, Larnaca, Cyprus	WS1 (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT
10:45 – 11:00	MP6 <b>MATHEMATICS IN MUSIC</b> Eva Papić Bogadi OS Antun Nemcic Gostovinski, Koprivnica, Croatia	MP42 <b>TO HEAL MATHEMATICALLY</b> Vernacchio Erika, Guerrera Salvatore, Del Gaudio Matteo Liceo scientifico "G. Rummo" Benevento, Italy	SP7 HOW COULD A WORLD NETWORK CURE CANCER WITH THE HELP OF MRNA VACCINES Konstantinos Zisimos 2nd High School of Chios, Greece	WS1 (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT
11:00 - 11:30	MATH & SCIENCE BREAK			

	Sunday, 12 March 2023 Pedagogical University of Krakow, Poland				
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops	
Coordinators	Tomasz Szemberg, Joanna Markowicz	Mirosława Sajka, Agnieszka Kowalska	Paulina Wiśniewska, Daniel Wójcik	Eleni Papageorgiou	
11:30 – 11:45	MP7 <b>3ANGLES</b> Marina Loizou, Myrianthi Savva, Daniella Biparva, Nancy Akar, Panagiota Antoniou American Academy Larnaca, Cyprus	MP43 <b>MATHS &amp; ARTIFICIAL INTELLIGENCES</b> Del Gaudio Matteo, Fusco Antonio, Manocchio Giuseppe Liceo scientifico "G. Rummo" Benevento, Italy	SP8 CAUSES OF POTATO BLIGHT AND WAYS TO COMBAT IT Nikoloz Chkareuli, Dachi Bitsadze, Bachana Ardoteli Tbilisi International School, Georgia	WS1 (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT	
11:45 – 12:00	MP8 THE RULES OF LOGIC ARE TO MATHEMATICS WHAT THOSE OF STRUCTURE ARE TO ARCHITECTURE- BERTRAND RUSSELL Elisavet Papachristoforou, Panayiota Kyriacou, Andriana Nikola, Polina Louka, Ellie Afxentiou, Mariam Kotzia, Fotia Miltiadous American Academy Larnaca, Cyprus	MP56 THE DYNAMICAL BEHAVIORS OF THE LOTKA-VOLTERRA PREDATOR-PREY MODEL Nikolas Manousakis Moraitis School, Athens, Greece	SP9 A THEATRICAL REPRESENTATION OF THE CHROMOSOMAL MECHANISM OF CELL DEGENERATION Anastasia Nikoladze, Barbare Tabidze, Nia Jikia, Lindi Chokheli, Sandro Cercvadze, Luka Janadze Tbilisi International School, Georgia	WS3 (FOR STUDENTS 60 MAX) MATHEMATICS AND ROSETTE *Mara Grašić, **Željka Hanžek *Osnovna škola "Braća Radić",Koprivnica, Croatia **Osnovna škola "Antun Nemčić Gostovinski"Koprivnica, Croatia	
12:00 – 12:15	MP9 HEXAGONS ARE THE BESTAGONS Maximos Vardas, Savio Nahas, Haoxiang Ma American Academy Larnaca, Cyprus	SP33 NERVOUS SYSTEM, NUROTRANSMITTERS AND DRUG ADDICTION(ESPECIALLY IN TERMS OF DOPAMINE AND OPIOIDS) Tae-Won Kim, Tae-Hoon Kim, Jae-In Kim Osung Middle School, Dae-Goo, South Korea	SP10 NUCLEAR FUSION: ON THE WAY TO BECOME A TYPE I PLANETARY CIVILISATION John-Luke Ampatzidis, Michael Betzounis, Orestis Gkitersos, George Tsalikidis, Lampros Tsivelikas De La Salle College, Thessaloniki, Greece	WS3 (FOR STUDENTS 60 MAX) MATHEMATICS AND ROSETTE	

	Sunday, 12 March 2023 Pedagogical University of Krakow, Poland				
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops	
Coordinators	Tomasz Szemberg, Joanna Markowicz	Mirosława Sajka, Agnieszka Kowalska	Paulina Wiśniewska, Daniel Wójcik	Eleni Papageorgiou	
12:15 – 12:30	MP10 <b>DESTINATION ; OUTER SPACE</b> Elina Chili, Demetra Loukia Foulia, Christos Michael, Maria Papaloizou, Avgilina Kyriakidou, Konstantinos Rossos, Alexandra Christoforou Alexandrou American Academy Larnaca, Cyprus	SP34 CONNECTING NEWTON'S LAWS OF MOTION INTO THE WORLD OF SUBATOMIC PARTICLES WITH APPROACHING FOUR FENDAMENTAL FORCES Kwon Min-Hyeok, Choi Si-woo, Jung Joo-Won, Bok Min-Jae, Kim Nam-Ho Osung Middle School, Daegu, South Korea	SP11 BLACK HOLES. STRANGER THAN FICTION Christos Charalambous, Giorgos Hadjiconstantis The Grammar School, Nicosia, Cyprus	WS3 (FOR STUDENTS 60 MAX) MATHEMATICS AND ROSETTE	
12:30 – 12:45	MP11 MATHEMATICS FIELD Christoforos Kekkou, Margarita Paraskevopoulou, Dimitris Georgiou, Giorgos Tsardellis, Stefanos Stylianou, Martin Stanev, Konstantinos Skordis American Academy Larnaca, Cyprus	SP35 UNDERSTANDING WORK-KINETIC ENERGY THEOREMS IN TERMS OF SCALAR QUANTATIES Seung-Heon Jang, Jun-Hong Park, Ji- Won Jung, Do-Yeop Kim Osung Middle School, Daegu, South Korea	SP12 <b>REGENERATION OF THE WORLD</b> Nefeli Kosti, Nikoletta Strati The Grammar School, Nicosia, Cyprus	WS3 (FOR STUDENTS 60 MAX) MATHEMATICS AND ROSETTE	
12:45 – 13:00	MP12 <b>MATHEMATICS PASS THROUGH THE</b> <b>PAST</b> Lazaros Zeniou American Academy Larnaca, Cyprus	SP36 INVESTIGATING THE IMPACT OF ANGULAR DISTORTION ON COLOR AND WORD PROCESSING: A ROTATED STROOP TEST STUDY Ruda Lee*, Jiho Song** *Korea International School (KIS) 27, South Korea **Saint Paul Preparatory Seoul 14-8, South Korea	SP13 THE CONSTRUCTION OF REALITY BY THE BRAIN. A STUDY OF CONSCIOUSNESS Chara Siekkeri, Anthi Raftopoulou The Grammar School, Nicosia, Cyprus		
13:00 – 14:00 13.30 – 14.30	Coupe	Lunch Break, Place: Bist	ro Piast, Piastowska 47 st. se who booked accommodation througl Y WRITTEN ON YOUR COUPON	h them.	

		Sunday, 12 Mar	ch 2023	
		Pedagogical University of	Krakow, Poland	
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops
Coordinators	Daniel Wójcik, Maria Skupień	Mirosława Sajka, Anna Petiurenko	Leszek Gasiński, Agnieszka Kowalska	Eleni Papageorgiou
14:45 – 15:00	MP13 <b>Maths = Money?</b> Eyal Israeli American Academy Larnaca, Cyprus	SP37 ENERGY EFFICIENT CLIMATE CONTROL Ko Aiden Sungmin Korea International School (KIS) 27, South Korea	SP6 <b>TIME TRAVEL</b> Lilian Michael, Lina Constantinou The English School Nicosia, Cyprus	WS1 –REPETITION (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT *DEUTSCHMANN Bernd, **MAIER Christoph, **JUCH Nikolaus** **TU-Graz, Head of Institute, **TU- Graz, Master Student, ***TU-Graz, Bachelor Student, Austria
15:00 – 15:15	MP15 <b>ESCAPE PLAN</b> Christoforos Panayi The English School Nicosia, Cyprus	SP38 WEARABLE TECHNOLOGY IN SHOES Kwon Roy Byeong Jun*, Kim Morgan Jae Hyun**, Shin Woong Jay*** *Cornerstone Collegiate Academy of Seoul (CCAS), South Korea **Seoul Foreign School (SFS) 39, Seoul, South Korea ***St. Johnsbury Academy (SJA) 10, Special Self-Governing Province, South Korea	SP14 <b>QUANTUM COMPUTING</b> Lovro Golubic Gimnazija "Fran Galovic", Koprivnica, Croatia	WS1-REPETITION (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT
15:15 – 15:30	MP16 DID YOU KNOW THERE IS A WAY TO WIN AT CONNECT FOUR LITERALLY 100% OF THE TIME ? Panayiotis Pantelides The English School Nicosia, Cyprus	MP31 WHERE DO WE MEET FIBONACCI SEQUENCE ? Igor Martyna, Igor Pajor, Oskar Tomasik, I Liceum Ogólnokształcące, Tarnowie, Poland	SP15 VOLCANIC CHEMISTRY Antonis Pissarides The G.C. School of Careers, Nicosia, Cyprus	WS1-REPETITION (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT

	Sunday, 12 March 2023				
Place	Room A1 (Ground Floor)	Pedagogical University of Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops	
Coordinators	Daniel Wójcik, Maria Skupień	Mirosława Sajka, Anna Petiurenko	Leszek Gasiński, Agnieszka Kowalska	Eleni Papageorgiou	
15:30 – 15:45	MP17 <b>CRIMINAL MATHS</b> Maya Maria Stavrinidou, Irene Yianna, Mariza Zembyla The English School Nicosia, Cyprus	MP33 <b>NON-EUCLIDEAN GEOMETRY</b> Kacper Maciuszek, Natalia Zając I Liceum Ogólnokształcące im. Kazimierza Brodzińskiego w Tarnowie, Poland	SP16 TRAVELLING WITH TIDES Giorgos Alexandrou, Marcos Phinikarides The G.C. School of Careers, Nicosia, Cyprus	WS1-REPETITION (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT	
15:45 – 16:00	MP28 THE STARS AND MATHS 2000 YEARS AGO Alexandros Parikian, Panagiotis Charitou The English School Nicosia, Cyprus	MP44 ALL SUSPENDEND ON A CATENARY Landolfi Domenico, Boscaino Bruno, Mancini Luigi, Poppa Gabriele, Petraccaro Mario, Cocca Martina Liceo scientifico "G. Rummo" Benevento, Italy	SP28 INVESTIGATING THE FUTURE OF AVIATION IN REGARDS TO THE DEVELOPMENT OF HYDROGEN CELLS AND THEIR APPLICATION Desislava Markova, Meriem Fereva, Valeria Topalova, American College of Sofia, Bulgaria	WS1-REPETITION (FOR STUDENTS 30 MAX) BLINKING LIGHTS: SOLDER YOUR OWN CIRCUIT	
16:00 – 16:15	MP64 EQUIVALENT GENERATION IN REAL CASES Zicheng Wang The G.C. School of Careers, Nicosia, Cyprus	MP45 GÖDEL AND THE PUZZLE OF INCOMPLETENESS : A WINDOW TO INFINITY Mario Petraccaro Liceo scientifico "G. Rummo" Benevento, Italy	SP39 THE BENEFITS OF VITAMIN C Hermes Arampatzis Charistos De La Salle College, Thessaloniki, Greece	WS7 (FOR STUDENTS AND TEACHERS MAX 60) HAVE FUN WITH SECRET CODES Eleni Papageorgiou Teacher Trainer in Mathematics, Cyprus Pedagogical Institute, Cyprus	
16:15 – 16:30	MP29 MATHEMATICS BEHIND GALAXIES'S SHAPE Xenia Pierides, Elli Louiza Porfyridou, Anastasia Tantele The English School Nicosia, Cyprus	MP46 MATHS AT THE MOVIES Vittoria Panarese, Chiara De Nigris, Christian Ianaro, Simone Ianaro Liceo scientifico "G. Rummo" Benevento, Italy	MP34 <b>MATHEMATICS IN MEDICINE</b> Ana-Marija De Conti, Laura Mesar Gimnazija "Fran Galovic" Koprivnica, Croatia	WS7 (FOR STUDENTS AND TEACHERS MAX 60) HAVE FUN WITH SECRET CODES	
16:30 – 16:45			MP35 MATH BEHIND THE DESIGN OF THE GREAT PYRAMID OF GIZA Eva Pavlovic, Petra Pozgaj Gimnazija "Fran Galovic" Koprivnica, Croatia	WS7 (FOR STUDENTS AND TEACHERS MAX 60) HAVE FUN WITH SECRET CODES MAY BE EXTENTED FOR 30 MORE MIN	

	Sunday, 12 March 2023 Pedagogical University of Krakow, Poland			
	Opening Ceremony			
	EUROMATH and EUROSCIENCE Conference 2023, European STEAME Conference 2023 Main Conference Room: NOVOTEL KRAKOW CITY WEST HOTEL			
	Invited speaker PL1			
	HOW THE INVENTION OF THE MICROCHIP CHANGED OUR WORLD Bernd Deutschmann, Professor of Electronics,			
18:00 - 19:30	Head of Institute of Electronics, Technical University of Graz, Austria			
	SEE SEPARATE DETAILED CONFERENCE OPENING PROGRAMME			
19:30 – 20:00	RECEPTION OFFERED BY THE PEDAGOGICAL UNIVERSITY OF KRAKOW Place: Novotel City West Hotel			

	Monday, 13 March 2023 Pedagogical University of Krakow, Poland				
REGISTRATION	S (ROOM 118): For Conference partic	cipants and competition finalists			
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops	
Coordinators	Barbara Barańska, Marcin Zieliński	Maria Skupień, Joanna Markowicz	Karol Gryszka, Jakub Kabat	Thomas Economou	
09:30 – 09:45	MP18 THE LABYRINTH OF MATHS IN OUR BRAIN! Ioanna Christofidou, Andreas Anastasi The English School Nicosia, Cyprus	MP61 SKETCHING GRAPHS OF POLYNOMIAL FUNCTIONS WITH A RESTRICTED NUMBER OF CUES Shin Ji Min, Shin Jung Heon Osung Middle School, Daegu, South Korea	SP17 THEORY OF RELATIVITY Loucas Nicolaides, Andreas Stylianou, Antonis Pissarides The G.C. School of Careers, Nicosia, Cyprus	WS2 (FOR STUDENTS AND TEACHERS 60 MAX) MATHEMATICS THROUGH MOVEMENT *Mara Grašić, **Željka Hanžek *Osnovna škola "Braća Radić", Koprivnica, Croatia **Osnovna škola "Antun Nemčić Gostovinski" Koprivnica, Croatia	
09:45 – 10:00	MP19 MATHS IN THE CASINO Gerasimos-Georgios Panayides, Chariton Charitonos, Garry Petrossian The English School Nicosia, Cyprus	MP62 FRACTALS AND ITS IMPLICATIONS WITHIN ARCHITECTURE Emily Namhyun Cho Asia Pacific International School (APIS), Seoul, South Korea	SP18 RADIO COMMUNICATION WITH THE INTERNATIONAL SPACE STATION Andreas Tsiakkouris The G.C. School of Careers, Nicosia, Cyprus	WS2 (FOR STUDENTS AND TEACHERS 60 MAX) MATHEMATICS THROUGH MOVEMENT	
10:00 - 10:15	MP20 MATHEMATICAL ESCAPES Elena Potamiti The English School Nicosia, Cyprus	MP36 MATHEMATICS IN CAR INDUSTRY Simon Sovic, Martin Majerus Gimnazija "Fran Galovic" Koprivnica, Croatia	SP29 THE SKIN OF THE EARTH Raman Vasiuk The Senior School, Nicosia, Cyprus	WS2 (FOR STUDENTS AND TEACHERS 60 MAX) MATHEMATICS THROUGH MOVEMENT	
10:15 – 10:30	MP21 IS YOUR BIRTH DATE JUST A NUMBER ? Riana Georgiadi, Theodora Constantinou The English School Nicosia, Cyprus	STEAME4 THE EU PROJECT: FACILITATE ARTIFICIAL INTELLIGENCE Andreas Skotinos, VIce President, Cyprus Mathematical Society Gregory Makrides, President, Cyprus Mathematical Society	SP30 <b>DESTINATION (UN)KNOWN</b> Stephanos Artemis, Simona Mitsi The Senior School, Nicosia, Cyprus	WS4 (FOR TEACHERS 60 MAX) A METHODOLOGY FOR ADDING ELEMENTS OF MATHEMATICS COMPETITIONS TO THE EDUCATIONAL PROCESS IN THE UPPER GRADES OF BASIC SCHOOL Maksim Ivanov, Natalia Ivanova, Julia Klochkova, Hiie Asser Tartu Annelinna Gymnasium, Tartu, Estonia	

	Monday, 13 March 2023 Pedagogical University of Krakow, Poland				
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops	
Coordinators	Barbara Barańska, Marcin Zieliński	Maria Skupień, Joanna Markowicz	Karol Gryszka, Jakub Kabat	Thomas Economou, Yiannis Lazarou	
10:30 – 10:45	MP22 INFINITY Giannis Stavrou, Giorgos Hadjikyriakou, Nicolas Anastasiades The English School Nicosia, Cyprus	STEAME 4 THE EU PROJECT: FACILITATE ARTIFICIAL INTELLIGENCE	SP20 FORMATION OF COPPER METAL CRYSTALS BY ELECTROLYSIS Jingwen Fu, Aimilios Papasotiriou The G.C. School of Careers, Nicosia, Cyprus	WS4 (FOR TEACHERS MAX 60) A METHODOLOGY FOR ADDING ELEMENTS OF MATHEMATICS COMPETITIONS TO THE EDUCATIONAL PROCESS IN THE UPPER GRADES OF BASIC SCHOOL	
10:45 – 11:00	MP23 IF SOCIAL MEDIA IS A MUST, THEN MATHS IS THE MUST OF THE MUST Aglaia Patsalides, Athanasia Mavrotheri The English School Nicosia, Cyprus	STEAME5 STEAME GOES HYBRID: BLUEPRINT GUIDELINES AND POLICY RECOMMENDATIONS Gregory Makrides, President, Cyprus Mathematical Society Andreas Skotinos, VIce President, Cyprus Mathematical Society	SP19 ROCKET FUEL FROM EVERY-DAY MATERIALS Ioannis Theocharides, Charis Charilaou, Konstantinos Kaniklides, Andreas Iacovides The G.C. School of Careers,Nicosia, Cyprus	WS4 (FOR TEACHERS MAX 60) A METHODOLOGY FOR ADDING ELEMENTS OF MATHEMATICS COMPETITIONS TO THE EDUCATIONAL PROCESS IN THE UPPER GRADES OF BASIC SCHOOL	
11:00 - 11:30	MATH & SCIENCE BREAK				
11:30 – 11:45	MP24 HOW TO USE MATHEMATICS TO CHOOSE A LIFE PARTNER Maria Christina Economides, Yiolanda Liveri, Alexandra Georgiou The English School Nicosia, Cyprus	MP37 UNEXPECTED MATHEMATICS Angelos Christoforou, Kyriacos Antoniades, Aris Pappalis, Theocharis Karatsiolis The G.C. School of Careers, Nicosia, Cyprus	SP31 FERROMAGNETISM Alexander Anton Faskevich The Senior School, Nicosia, Cyprus	WS5 (FOR TEACHERS MAX 60) MATHEMATICAL THEATRE Yiannis Lazarou Mathematics (STEAM) Teacher, Pancyprian Gymnasium Nicosia, Cyprus	
11:45 – 12:00	MP25 HOW MATHEMATICS IMPACTED THE COURSE OF WW2 Filaretos Ierotheou, Damianos Hambakis The English School Nicosia, Cyprus	MP38 <b>THE ROUTE</b> Aikaterini Pilidi, Eva-Christina Christodoulou The G.C. School of Careers, Nicosia, Cyprus	SP32 CAN WE LIVE ON MARS? Theodora Gorman The Senior School, Nicosia, Cyprus	WS5 (FOR TEACHERS MAX 60) MATHEMATICAL THEATRE	

	Monday, 13 March 2023 Pedagogical University of Krakow, Poland				
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops	
Coordinators	Barbara Barańska, Marcin Zieliński	Maria Skupień, Joanna Markowicz	Karol Gryszka, Jakub Kabat	Yiannis Lazarou	
12:00 – 12:15	MP26 HOW CAN MATHS TRAVEL AROUND THE WORLD Sophia Anastasi, Efi Zanou, Mariella Leptou The English School Nicosia, Cyprus	MP39 MATHS IN SEA WAVES Sotia Koukou, Konstantinos Patinios, Nikolas Xiouros The G.C. School of Careers, Nicosia, Cyprus	SP24 ARCHITECTURE ON PLANETS! Mohamed Ben Zerti Med High Private English School, Larnaca, Cyprus	WS5 (FOR TEACHERS MAX 60) MATHEMATICAL THEATRE	
12:15 – 12:30	MP27 HOW ANIMALS USE MATH Ioannis Ioannou, Platon Trapelides, Leonidas Sfaltos The English School Nicosia, Cyprus	MP40 <b>MATHS IN MAGIC TRICKS</b> Michalis Dionysis Vassiliou The G.C. School of Careers, Nicosia, Cyprus	SP22 LICHTENBERG FIGURE Chrysi Topouzidou, Anastasia Perentzi, Dimitra Taltampani, Terpsichori Loupi De La Salle College, Thessaloniki, Greece	WS5 (FOR TEACHERS MAX 60) MATHEMATICAL THEATRE	
12:30 – 12:45	MP47 GEOMETRY OF EUCLID AND GEOMETRY OF LOBACHEVSKY Sofiia Andrusenko 8-V Class, Ukrainian College No. 272, Kyiv, Ukraine	MP41 THROUGH THE VIVIANI'S WINDOW Antonina Dulak, Joanna Szczęsna VII Liceum Ogólnokształcące im. Zofii Nałkowskiej, Poland	SP23 THE END OF CERTAINTY: PROJECTION OF QUANTUM BEHAVIOR ONTO THE MACROSCALE Athanasia Dalakoura Axion Schools, Xanthi, Greece	WS5 (FOR TEACHERS MAX 60) MATHEMATICAL THEATRE	
12:45 – 13:00	MP32 SUMMATION, NUMBERS AND SHAPES IN GEOMETRY Giorgi Ratiani, Lizi Katamadze, Mariam Jikia, Lela Ardoteli Tbilisi International School, Georgia	MP63 EULER'S GRAPH THEORY AND ITS APPLICATION IN REAL LIFE Park Seoyul, Kim Donggeon Daegu International School, Daegu, South Korea	SP21 THE FUTURE OF CANCER IMMUNOTHERAPY: CAR-T CELL THERAPY Anna Mouzourou, Andrea Miltiadous, Panayiotis Aristotelous The G.C. School of Careers, Nicosia, Cyprus		
13:00 – 14:00 13:30 – 14:30	Lunch Break, Place: Bistro Piast, Piastowska 47 st. Coupons offered by TopKinisis Travel to those who booked accommodation through them. CHECK YOUR TIME OF ENTRY WRITTEN ON YOUR COUPON				

	Monday, 13 March 2023					
	Pedagogical University of Krakow, Poland					
Place	Room A1 (Ground Floor)	Room A2 (First Floor)	Room A3 (First Floor)	Room 216 (Second Floor) Workshops		
Coordinators	Daniel Wójcik, Ireneusz Krech	Grzegorz Malara, Jakub Kabat	Paulina Wiśniewska, Łukasz Merta	Elpi Margariti		
14:45 – 15:00	STEAME1 SCIENTIX THE COMMUNITY FOR SCIENCE EDUCATION IN EUROPE. TAKE PART IN THE STEM DISCOVERY CAMPAIGN! Katarzyna Kwiatek-Grabarska Scientix Ambassador / Complex of Schools No. 5, Zabrze, Poland,	MP48 <b>BEES AS MATHEMATICIANS</b> Andriana Hadjisophocleous, Erato Gavri, Christina Prodromiti The Grammar School, Nicosia, Cyprus	SP25 THE TOXICITY OF HEAVY METALS AND THEIR EFFECTS ON HUMANS AND THE ENVIRONMENT Avramidou Panagiota, Dedousi Ismini De La Salle College, Thessaloniki, Greece	WS6 (FOR STUDENTS AND TEACEHRS MAX 60) <b>KAHOOT QUIZ</b> Mara Grasic*, Bojana Habek** OS "Braca Radic" Korivnica; Gimnazija "Fran Galovic" Koprivnica, Croatia		
15:00 – 15:15	MP14 THE UNIVERSE IN A CALCULATOR Petra Bušljeta, Zrinka Miškić, Nika Tomljanović, Lana Vučetić Prva riječka hrvatska gimnazija, Croatia	MP49 MATHEMATICS AND THE ART OF POKER Marios Varnava The Grammar School, Nicosia, Cyprus	SP26 THE EFFECT OF INTESTINAL MICROBIOME ON HUMAN MENTAL AND PHYSICAL HEALTH – A CONNECTION BETWEEN THE INTESTINAL AND NEURAL SYSTEM Stathi Krystallia-Maria, Fragkoulidou Sofia, Timamopoulou Angeliki De La Salle College, Thessaloniki, Greece	WS6 (FOR STUDENTS AND TEACEHRS MAX 60) KAHOOT QUIZ		
15:15 – 15:30	MP30 <b>THE COLLATZ CONJECTURE</b> Vitos Fotios, Vrontos Dimitrios, Gourdoupari Nefertiti, Karpouzis Christos Varvakeio Model High School, Athens, Greece Supervisor Professor: Zinon Ligatsikas	MP50 RISK IT FOR THE BISCUIT: CAN WE USE RISK AND PROBABILITY TO MAKE BETTER LIFE CHOICES AND SUCCEED? Odysseas Leonidou The Grammar School, Nicosia, Cyprus	SP27 THE CONSEQUENCES OF THE POLAR ICE MELTDOWN AND THE GREENHOUSE PHENOMENON A.Samaras, S.Drepanidis, O.Arampatzis De La Salle College, Thessaloniki, Greece	WS6 (FOR STUDENTS AND TEACEHRS MAX 60) KAHOOT QUIZ		

	Monday, 13 March 2023 Pedagogical University of Krakow, Poland				
	MATH & SCIENCE Poster Design Competition ends.				
Place	Room: Conference Room, NOVOTEL City West hotel				
Coordinators	C. Papagiannis, T. Economou, E. Margariti				
16:00 – 19:00	MATH & SCIENCE Factor Europe 2023 Competitions – Finals Open to the public				
Finalists L	evels 9-13 years old				
	and tennis", Mia Gregurina, OŠ "Braća Radić" Koprivnica, Croatia				
	ematics in History", Juraj Aščić, OŠ "Braća Radić" Koprivnica, Croatia				
	ematics and music", Amadea Filipović, OŠ "Braća Radić" Koprivnica, Croatia				
	, Natural Numbers and Sudoku", Jiyul, Kim, Daegu Samyook Elementary School, South Korea				
	ematics and astronomy", Antea Jelović, OŠ "Braća Radić" Koprivnica, Croatia				
	ct numbers", Anja Horvat, OŠ "Braća Radić" Koprivnica, Croatia				
•	ithm for solving quadratic equations", Laura Šifkorn, OŠ "Braća Radić" Koprivnica, Croatia				
	ve see a Ghost?", Dohyeok Kwon, Daegu Dongdo Elementary School, South Korea				
	ematics and time", Marta Gregurina, OŠ "Braća Radić" Koprivnica, Croatia				
•	nese calculating", Erik Žeželj , OŠ "Braća Radić" Koprivnica, Croatia				
	resting facts about the time on the clock", Gloria Martošić, OŠ "Braća Radić" Koprivnica, Croatia				
	et of Venus", Ki Yun Jung, Daegu Maedong Elementary School, South Korea h and faathall", Laana Salainal, OŠ "Braća Badić" Kanrivnica, Graatia				
	3. "Math and football", Leona Salajpal, OŠ "Braća Radić" Koprivnica, Croatia 4. "The biggest numbers in math", Matei Markovinović, OŠ "Braća Radić" Koprivnica, Croatia				
	/SFL14. "The biggest numbers in math", Matej Markovinović, OŠ "Braća Radić" Koprivnica, Croatia /SFL15. "Number 7", Marin Bojanovic, Osnovna skola "Antun Nemcic Gostovinski" Koprivnica, Croatia				
IVISI LIS. INUII	iber 7, Marin Bojanović, Osnovna skola Antun Menicić Gostovinski Roprivinca, čroatia				

Finalists	14-18 years old				
MSFU1. "Mair	FU1. "Main Sequence Star", Do yeop Kim, O-sung Middle School, Daegu, South Korea				
MSFU2. "Calc	U2. "Calculate as pharmacist", Marija Švegović, OŠ "Braća Radić" Koprivnica, Croatia				
,	U3. "Gyroscopes resist to gravity", Minhyeok Kwon, O-sung Middle School, Daegu, South Korea				
	-U4. "Math & Music", Eva Papic Bogadi, Osnovna skola "Antun Nemcic Gostovinski" Koprivnica, Croatia				
	SFU5. "Orbital eccentricity", Kim Namho, O-sung Middle School, Daegu, South Korea				
	SFU6. "Al Take Over", Aikaterini Stephanou, Lyceum of Aradippou, Cyprus				
	SFU7. "History of the periodic table", Jang Seung Heon, O-sung Middle School, Daegu, South Korea				
	/SFU8. "Nina and the twelve lions", Eirini Panagi, Xylofagou Gymnasium, Cyprus				
	1SFU9. "Where did my memory go?", Ruda Lee, South Korea 1SFU10. "Vitamin C", Marija Švegović, Udruga mladih koprivničkih matematičara, Croatia				
Dinner Dance "Mathematics and Science by Night",					
	Place: Premier Krakow Hotel, ul. Opolska 14a, 31-323 Krakow.				
20:30 - 00:30	Bus transfers begin every 10 min at 19.30				
	Check your bus number at registration announcements BUS1, BUS2, BUS3, BUS4, BUS5, BUS6				
	If you miss the bus you need to arrange your own transfer, it is 2,5 km walking distance or use a taxi.				

Tuesday, 14 March 2023 NOVOTEL CITY WEST						
Place	Hotel Conference Room ONLINE SESSION					
Coordinators	Pawel Solarz					
10:00 - 10:15	MP57-ONLINE INNOVATIVE SOLUTION OF FRACTIONAL PROBLEMS AND A SUMMARY OF ITS METHODS Nahal Mannani Zanjan Sama Elementary School, Zanjan, Iran					
10:15 – 10:30	MP58-ONLINE VISUAL SOLUTION OF FRACTIONAL PROBLEMS AND EQUATIONS Shayan Hasani Zanjan Iranin First Grade High school, Zanjan, Iran					
10:30 - 10:45	MP59 -ONLINE APPLICATION OF BOOLEAN ALGEBRA IN THE DESIGN OF DIGITAL COUNTERS Diana Mannani Farzangan Zanjan First Grade High School, Iran					
10:45 - 11:00	MP60 - ONLINE APPLICATION OF THE REMAINDER OF DIVISION IN SOLVING IMPORTANT MATHEMATICAL PROBLEMS Seyedeh Elisa Hashemi Zanjan Sama Elementary School, Zanjan, Iran					

	Tuesday, 14 March 2023					
Bistro Piast, Piastowska 47 st. Pedagogical University of Krakow, Poland						
Coordinators	cors C. Papagiannis, E. Papageorgiou, E. Margariti					
	MATH & SCIENCE Theatre Europe 2023 Competition – Finals (Theatre stage, Bistro Piast, Piastowska 47 st.)					
	(Open to the public)					
9.30 – 12.00	Cheat 10					
	Finalists Level 9-13 years old					
	Level 9-13 years					
	MSTL1. "What's Math got to do with Fencers and Magicians?", Liceul Teoretic Tudor Arghezi & Jacstyle Model&Talent					
	Agency, Romania					
	MSTL2. "The broken TV-control", Pagkyprion Gymnasiun Nicosia, Cyprus MSTL3. "The three problems of Geometry", I.M.Panagiotopoulos School, Greece MSTL4. "Fermanji", Szkoła Podstawowa im. J. Korczaka w Zabierzowie, Poland					
	MSTL5. "Your hat, your life!!!", Xylofagou Gymnasium, Cyprus					
	MSTL6. "Roots, Stem, Leaves, Flower", Jacstyle Model&Talent Agency, Romania					
	Finalists Level 14-18 years old					
	Level 14-18 years					
	MSTU1. "Irrationals", The English School Nicosia, Cyprus					
	MSTU2. "Five Senses", South Korea group of students, South Korea					
	MSTU3. "Seventeenth Night, Apostol Doxiadis", Lykeio Kokkinochoriwn "Foti Pitta", Cyprus					
13:00 – 14:00	Lunch Break, Place: Bistro Piast, Piastowska 47 st.					
13:30 – 14:30	Coupons offered by TopKinisis Travel to those who booked accommodation through them. CHECK YOUR TIME OF ENTRY WRITTEN ON YOUR COUPON					
15.00+	Optional Excursions privately arranged					

Tuesday, 14 March 2023 NOVOTEL City West Hotel, Krakow						
	AWARDS CEREMONY (Place: Conference room at the NOVOTEL City West Hotel)					
3.14 PM	<b>PUBLIC MEDIA STATEMENTS</b> STEAME-Students Press Conference : European STEAME School Students Network (E3SN) Prof. Gregory Makrides, Chair of the EMS Education Committee Prof. Piotr Borek, Rector of the Pedagogical University of Krakow, Poland	INTERNATIONAL DAY OF MATHEMATICS MARCH 14				
Coordinators	C. Papagiannis, A. Charalambous, E. Papageorgiou, E. Margariti					
15.15 – 17.00	Results of MATH & SCIENCE Poster Design 2023 Competition Results of MATH & SCIENCE Theatre Europe 2023 Results of MATH & SCIENCE Factor Europe 2023 Results of MATHPresentation 2023 Competition Results SCIENCEPresentation 2023 Competition Results of best ETHOS award during the conference					
Wednesday, 15 March 2023						
All day	Optional Excursions and Departures (privately arranged)					

Podchorążych st. nath 2 2 3 euro 118 first floor REGISTRATION 216 second floor WORKSHOP euro science 2023 109 first floor STEAME STUDENTS HYBRID A1 ground floor A2, A3 first floor Nel PRESENTATIONS M. Smoluchowskiego st Warmijska st. -\*\* / 11 A. Chmiela st. Corridor first floor ENTRANCE HERE POSTER EXHIBITION

**Conference Area Spaces and Rooms** 

