Ministry of Education and Science of Ukraine
Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University
Vinnytsia National Technical University
Kamianets-Podilskyi Ivan Ohiienko National University
Ivan Franko National University of Lviv
Ukrainian State Dragomanov University
Poltava V.G. Korolenko National Pedagogical University
Lesya Ukrainka Volyn National University
National University of Life and Environmental Sciences of Ukraine
Jan Kochanowski University of Kielce (Poland)
Polytechnic University of Madrid (Spain)
Tallinn University (Estonia)



V International Scientific and Practical Internet Conference «Mathematics and Informatics in Science and Education: Challenges of Modernity»

May 1-2, 2025, Vinnytsia, Ukraine

CONFERENCE PROGRAM

Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Faculty of Mathematics, Physics and Computer Science, Ostrozkoho str., 32, building № 3, Vinnytsia, 21001. E-mails: kovtonyukmm@vspu.edu.ua, sergiy.bak@vspu.edu.ua. The conference website https://fmft.vspu.edu.ua/kafedra-matematyky-ta-informatyky/konfmain.html.

SCIENTIFIC COMMITTEE

Natalia Lazarenko (chair, Vinnytsia, Ukraine), Alla Kolomiiets (vice-chair, Vinnytsia, Ukraine), Serhii Bak (Vinnytsia, Ukraine), Tetiana Barbolina (Poltava, Ukraine), Mykola Bokalo (Lviv, Ukraine), Oleh Buhrii (Lviv, Ukraine), Volodymyr Fedorchuk (Kamianets-Podilskyi, Ukraine), Roman Hurevych (Vinnytsia, Ukraine), Kaja Mädamürk (Tallinn, Estonia), Yulia Meish (Kyiv, Ukraine), Iryna Khomyuk (Vinnytsia, Ukraine), Oksana Klochko (Vinnytsia, Ukraine), Vitalii Klochko (Vinnytsia, Ukraine), Mariana Kovtoniuk (Vinnytsia, Ukraine), Ivan Konet (Lutsk, Ukraine), Grzegorz Łysik (Kielce, Poland), David Luengo (Madrid, Spain), Volodymyr Mykhalevych (Vinnytsia, Ukraine), Vira Petruk (Vinnytsia, Ukraine), Mykola Pratsiovytyi (Kyiv, Ukraine).

ORGANIZING COMMITTEE

Mariana Kovtoniuk (chairman, Vinnytsia, Ukraine), Serhii Bak (vice-chairman, Vinnytsia, Ukraine), Halyna Kovtoniuk (conference secretary, Vinnytsia, Ukraine), Ivanna Leonova (conference secretary, Vinnytsia, Ukraine), Tetiana Barbolina (Poltava, Ukraine), Oleh Buhrii (Lviv, Ukraine), Kateryna Heseleva (Kamianets-Podilskyi, Ukraine), Svitlana Kyrylashchuk (Vinnytsia, Ukraine), Oksana Klochko (Vinnytsia, Ukraine), Olena Kosovets (Vinnytsia, Ukraine), Yaroslav Krupskyi (Vinnytsia, Ukraine), Yulia Meish (Kyiv, Ukraine), Volodymyr Mykhalevych (Vinnytsia, Ukraine), Olena Soia (Vinnytsia, Ukraine), Liubov Tiutiun (Vinnytsia, Ukraine), Viktor Shchyrba (Kamianets-Podilskyi, Ukraine).

CONFERENCE PROGRAM

Thursday, May 1, 2025, PLENARY SESSION (mixed format)

8:30 – 09:15 **Registration (offline) / Connection (online)**

09:15 – 09:40 Opening of the Conference

09:40 - 13:20 Plenary talks

Friday, May 2, 2025, SECTION SESSIONS (online)

09:45 - 10:00 Connection (online)

10:00 - 13:00 Section talks

13:00 – 14:00 Lunch break

14:00 – 14:30 Closing of the Conference

There will be plenary talks (duration 20 min.) and section talks (duration 15 min., i.e. 10 min. talk + 5 min. questions).

Online (Google Meet connection)

PLENARY SESSION https://meet.google.com/pap-kugn-oij

SECTION SESSIONS

SECTION A https://meet.google.com/dtu-ghmk-zpw

- 1. Modern problems of mathematics
- 2. Modern problems of computer science
- 3. Mathematical and computer modeling

SECTION B https://meet.google.com/fiz-kpcs-hqt

- 4. Creation of educational environment in mathematics and computer science in higher education
- 5. Monitoring of the quality of education: tools and technologies
- 6. Modern computer technologies in teaching mathematics and computer science

SECTION C https://meet.google.com/jwf-zvzg-jfb

7. Methods of teaching mathematics and computer science in secondary education

Closing of the Conference https://meet.google.com/pap-kugn-oij

PLENARY SESSION Thursday, May 1, 2025 mixed format:

offline (Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Ostrozkoho str., 32, building № 1, Educational Hub «NotBox») and online (Google Meet connection https://meet.google.com/pap-kugn-oij)

Chair Natalia Lazarenko, Dr. Sc. Vice-chair Alla Kolomiiets, Dr. Sc. Secretary Ivanna Leonova, M. Sc.

- 1. 09:15- *Natalia Lazarenko, Dr. Sc.*, rector of Vinnytsia Mykhailo 09:20 Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine WELCOME SPEECH TO THE PARTICIPANTS OF THE CONFERENCE
- 2. 09:20– *Alla Kolomiiets, Dr. Sc.*, vice-rector for scientific work of Vinnytsia 09:25 Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine

 WELCOME SPEECH TO THE PARTICIPANTS OF THE CONFERENCE
- 3. 09:25– *Mariana Kovtoniuk, Dr. Sc.*, Vinnytsia Mykhailo Kotsiubynskyi State 09:35 Pedagogical University, Vinnytsia, Ukraine WELCOME SPEECH TO THE PARTICIPANTS OF THE CONFERENCE
- 4. 09:35– *Alina Voievoda, Cand. Sc.*, dean of the Faculty of Mathematics, 09:40 Physics and Computer Science, Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine WELCOME SPEECH TO THE PARTICIPANTS OF THE CONFERENCE
- 5. 09:40– **Dmytro Bobyliev, Cand. Sc.,** Kryvyi Rih State Pedagogical University, 10:00 Kryvyi Rih, Ukraine
 LEAN AS A TOOL FOR INTERACTIVE THEOREM PROVING IN THE PROFESSIONAL TRAINING OF MATHEMATICS TEACHERS
- 6. 10:00– *Eve Kikas, Ph. D.*, Tallinn University, Tallinn, Estonia 10:20 SELF-REGULATED LEARNING AND MATH SKILLS. ESTONIAN EXPERIENCE IN ASSESSING SELF-REGULATED COMPETENCE
- 7. 10:20– *Liubov Tiutiun, Cand. Sc., Olena Kosovets, Cand. Sc., Olena Soia,* 10:40 *Cand. Sc., Mariana Kovtonyuk, Dr. Sc.* Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine MATHEMATICAL LANDSCAPE PARKS AS AN ENVIRONMENT FOR MODELING RESEARCH PROJECTS, SCIENTIFIC RESEARCH AND POPULARIZATION OF MATHEMATICS
- 8. 10:40- Kaja Mädamürk, Ph. D., Tallinn University, Tallinn, Estonia

- 11:00 ASSESSMENT OF MATH COMPETENCE IN ESTONIA
- 9. 11:00- Volodymyr Mykhalevych, Dr. Sc., Oksana Tiutiunnyk, Cand. Sc., 11:20 Yurii Dobraniuk, Cand. Sc., Vinnytsia National Technical University,
 - Vinnytsia, Ukraine SPECIFIC FEATURES OF REDUCING A VARIATIONAL PROBLEM OF HEREDITARY DAMAGE THEORY TO A NONLINEAR PROGRAMMING TASK
- 10. 11:20- Triinu Kilp-Kabel, M. A., Tallinn University, Tallinn, Estonia
 - 11:40 ESTONIAN GRADE NINE NATIONAL MATH EXAM RESULTS: ITS RELATIONSHIP WITH INTEREST AND NOVEL MATH SKILLS
- 11. 11:40- Serhii Bak, Dr. Sc., Halyna Kovtoniuk, Cand. Sc. Vinnytsia Mykhailo
 - 12:00 Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine
 ON TRAVELING WAVES IN FERMI–PASTA–ULAM-TYPE
 SYSTEMS WITH NONLOCAL INTERACTION ON A 2DLATTICE
- 12. 12:00- Hardi Sigus, M. A., Tallinn University, Tallinn, Estonia
 - 12:20 BASIC PSYCHOLOGICAL NEEDS AND CURIOSITY RELATED TO SCIENCE SUBJECTS IN ONE SCHOOL SETTING IN ESTONIA
- 13. 12:20- Katrina Nurmoja, M. A., Tallinn University, Tallinn, Estonia
 - 12:40 BASIC PSYCHOLOGICAL NEEDS AND CURIOSITY RELATED TO SCIENCE SUBJECTS IN ONE SCHOOL SETTING IN ESTONIA
- 14. 12:40- Vasyl Abramchuk, Cand. Sc., Vinnytsia Mykhailo Kotsiubynskyi
- 13:00 State Pedagogical University, Vinnytsia, Ukraine, *Ihor Abramchuk*, Vinnytsia National Technical University, Vinnytsia, Ukraine MATHEMATICAL MODELS IN DIGITAL INFORMATION CODING TASKS

SECTION SESSIONS

SECTION A

- 1. MODERN PROBLEMS OF MATHEMATICS
- 2. MODERN PROBLEMS OF COMPUTER SCIENCE
- 3. MATHEMATICAL AND COMPUTER MODELING

Friday, May 2, 2025, online (Google Meet connection)

https://meet.google.com/dtu-ghmk-zpw

Chair **Serhii Bak, Dr. Sc.** Secretary **Halyna Kovtoniuk, Cand. Sc.**

- 10:00- Zlata Bondarenko, Cand. Sc., Svitlana Kyrylashchuk, Cand. Sc., 10:15 Vitaly Klochko, Dr. Sc., Vinnytsia National Technical University, Vinnytsia, Ukraine OPTIMIZATION OF HEATING SYSTEMS BASED ON IOT DATA ANALYSIS AND FOURIER TRANSFORM
- 2. 10:15- Petro Boyko, Lviv Polytechnic National University, Lviv, Ukraine,
 - 10:30 *Halyna Lopushanska, Dr. Sc.* Ivan Franko National University of Lviv, Lviv, Ukraine
 SOURCE INVERSE PROBLEM IN SPACES OF BESSEL POTENTIALS
- 3. 10:30– *Oleh Buhrii, Dr. Sc., Anastasiia Holovenko,* Ivan Franko National 10:45 University of Lviv, Lviv, Ukraine NUMERICAL APPROXIMATION OF SOLUTIONS OF STOCHASTIC DIFFERENTIAL EQUATIONS
- 4. 10:45- **Dobraniuk Yurii, Cand. Sc., Blashchuk Nadiya, Barbaliuk Maksym,**11:00 Vinnytsia National Technical University, Vinnytsia, Ukraine
 APPLICATION SKM MAPLE TO REDUCE THE OUADRATIC

FORM OF EXPRESSION TO THE CANONICAL FORM

- 11:00- Taras Goy, Cand. Sc., Vasyl Stefanyk Precarpathian National
 11:15 University, Ivano-Frankivsk, Ukraine
 SOME PROPERTIES OF HIGHER-ORDER PELL NUMBERS VIA
 TOEPLITZ HESSENBERG DETERMINANTS
- 6. 11:15— *Kateryna Heseleva, Cand. Sc.*, Kamianets-Podilskyi Ivan Ohiienko 11:30 National University, Kamianets-Podilskyi, Ukraine APPLICATION OF A SINGLE VARIANT OF THE COLLOCATIONAL-ITERATIVE METHOD FOR INTEGRO-FUNCTIONAL EQUATIONS WITH SMALL NONLINEARITY
- 7. 11:30– *Uliana Hudyma, Cand. Sc., Vasyl Gnatyuk, Cand. Sc., Kamianets-* 11:45 Podilskyi Ivan Ohiienko National University, Kamianets-Podilskyi,

Ukraine

THE CRITERION OF EXTREMALITY OF AN ELEMENT FOR THE PROBLEM OF FINDING A GENERALIZED STEINER'S POINT OF SEVERAL CLOSED BALLS IN A LINEAR NORMED SPACE WITH RESPECT TO A CONVEX SET OF CLOSED BALLS IN THIS SPACE

- 8. 11:45– *Mykola Lukin, Anatolii Yakunin, Cand. Sc.*, O. M. Beketov National 12:00 University of Urban Economy in Kharkiv, Kharkiv, Ukraine GIELIS SUPERCURVES A TECHNOLOGICAL TOOL FOR MODELING COMPLEX SHAPES
- 9. 12:00– *Tetiana Pylypiuk, Cand. Sc.*, Kamianets-Podilskyi Ivan Ohiienko 12:15 National University, Kamianets-Podilskyi, Ukraine DATA ANALYTICS AND VISUALIZATION IN POWER BI

Poster talks

- 10. *Volodymyr Mykhalevych, Dr. Sc.*, Vinnytsia National Technical University, Vinnytsia, Ukraine; *Mykola Kolisnyk*, Vinnytsia National Agrarian University, Vinnytsia, Ukraine; *Andrii Shtuts, Cand. Sc.*, Vinnytsia National Agrarian University, Vinnytsia, Ukraine MATHEMATICAL MODELING OF DEFORMATION TRAJECTORIES OF MACROPARTICLES IN HAZARDOUS ZONES OF WORKPIECES DURING FLOW FORMING
- Victor Shchyrba, Cand. Sc., Kamianets-Podilskyi Ivan Ohiienko 11. University, Kamianets-Podilskyi, **National** Ukraine, Marvna Miastkovska, Cand. Sc., Kamianets-Podilskyi Ivan Ohiienko National University, Kamianets-Podilskyi, Ukraine **MULTIPROCESSING METHODS** FOR **FORMING ROUTES OPTIMIZATION USING** THE **ANT COLONY ALGORITHM**

SECTION B

4. CREATION OF EDUCATIONAL ENVIRONMENT IN MATHEMATICS AND COMPUTER SCIENCE IN HIGHER EDUCATION

5. MONITORING OF THE QUALITY OF EDUCATION: TOOLS AND TECHNOLOGIES

6. MODERN COMPUTER TECHNOLOGIES IN TEACHING MATHEMATICS AND COMPUTER SCIENCE

Friday, May 2, 2025, Google Meet connection

https://meet.google.com/fiz-kpcs-hqt

Chair Mariana Kovtonyuk, Dr. Sc. Secretary Olena Soia, Cand. Sc.

- 1. 10:00– Vasyl Abramchuk, Cand. Sc., Vinnytsia Mykhailo Kotsiubynskyi 10:15 State Pedagogical University, Vinnytsia, Ukraine; Dmytro Babiuk, Golodkiv gymnasium of Khmilnyk City Council, Vinnytsia region, Ukraine; Liubov Tiutiun, Cand. Sc., Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine USING ARTIFICIAL INTELLIGENCE CAPABILITIES IN TEACHING AND ASSESSING THE QUALITY OF KNOWLEDGE IN MATHEMATICS
- 2. 10:15– Tetiana Barbolina, Dr. Sc., Poltava V. G. Korolenko National 10:30 Pedagogical University, Poltava, Ukraine IMPLEMENTING STUDENT-CENTERED AND DIGITAL LEARNING METHODS AT POLTAVA NATIONAL PEDAGOGICAL UNIVERSITY WITHIN THE ERASMUS+ BOOST PROJECT
- 3. 10:30– *Oleksandr Dovbnia*, Drahomanov Ukrainian State University, Kyiv, 10:45 Ukraine

 VIDEO AS A MEANS OF FUNDAMENTALIZING THE TEACHING OF COMPUTER SCIENCE DISCIPLINES
- 4. 10:45– *Lesya Haybun, Olga Kravchuk, Cand. Sc.*, Lesya Ukrainka Volyn 11:00 National University, Lutsk, Ukraine LIVEWORKSHEETS NEW OPPORTUNITIES FOR TEACHERS AND STUDENTS
- 5. 11:00– Yulia Ilnitska, Vinnytsia Cooperative Institute, Vinnytsia, Ukraine; 11:15 Victoria Medvedska, Vinnytsia Vocational College of the National University of Food Technologies, Vinnytsia, Ukraine INNOVATIONS IN COMPUTER SCIENCE EDUCATION THROUGH BLOCKCHAIN TECHNOLOGY

- 6. 11:15– *Halyna Kashkanova, Cand. Sc.*, Vinnytsia National Technical 11:30 University, Vinnytsia, Ukraine DIDACTIC BASIS OF THE COMPETENCY-BASED APPROACH TO THE FORMATION OF PROFESSIONAL ORIENTATION WHEN STUDYING THE COURSE OF FUNDAMENTAL DISCIPLINES IN A TECHNICAL INSTITUTION OF HIGHER EDUCATION
- 7. 11:30– *Iryna Khomyuk, Dr. Sc., Victor Khomyuk, Cand. Sc.*, Vinnytsia 11:45 National Technical University, Vinnytsia, Ukraine MULTIMEDIA TECHNOLOGIES IN THE PROCESS OF TEACHING HIGHER MATHEMATICS
- 8. 11:45– *Maryana Kovtonyuk, Dr. Sc., Olena Soia, Cand. Sc.,* Vinnytsia 12:00 Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine

 MODERN ASPECTS OF MATHEMATICS TEACHING METHODS IN THE PROFESSIONAL TRAINING OF FUTURE MATHEMATICS TEACHERS
- 9. 12:00– *Victoria Medvedska, Victoria Maranchak,* Vinnytsia Vocational 12:15 College of the National University of Food Technologies VIRTUAL AND AUGMENTED REALITY IN EDUCATION: INNOVATIVE APPROACHES TO TEACHING EXACT SCIENCES
- 10. 12:15— *Oleksii Panasenko, Cand. Sc.*, Vinnytsia Mykhailo Kotsiubynskyi 12:30 State Pedagogical University, Vinnytsia, Ukraine DIGITAL ADMINISTRATION AND MONITORING OF FACULTY ACTIVITIES USING GOOGLE SHEETS AND PYTHON
- 11. 12:30– *Kateryna Rumyantseva, Cand. Sc.*, Vinnytsia Educational and 12:45 Scientific Institute of Economics West Ukrainian national university, Vinnytsia, Ukraine

 THE EFFECTIVENESS OF THE USE OF MODERN SOFTWARE IN THE MATHEMATICAL TRAINING OF FUTURE ECONOMISTS

Poster talks

- 12. **Vitalii Klochko, Dr. Sc.,** Vinnytsia National Technical University, Vinnytsia, Ukraine; **Oksana Klochko, Dr. Sc.,** Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine FUNCTIONS OF CONSTRUCTIVE MATHEMATICS TEACHING USING DIGITAL TECHNOLOGIES
- 13. Alona Kolomiiets, Dr. Sc., Vitaly Klochko, Dr. Sc., Kyrylashchuk Svitlana, Cand. Sc., Vinnytsia National Technical University, Vinnytsia, Ukraine
 FUNCTIONAL APPROACH TO THE FUNDAMENTALIZATION OF MATHEMATICAL TRAINING OF STUDENTS OF TECHNICAL SPECIALTIES
- 14. Alona Kolomiiets, Dr. Sc., Mykhailo Lysyi, Cand. Sc., Maya

Kovalchuk, Dr. Sc., Vinnytsia National Technical University, Vinnytsia, Ukraine

THE TASK APPROACH IS ONE OF THE CONCEPTUAL APPROACHES TO FUNDAMENTALIZING THE MATHEMATICAL TRAINING OF STUDENTS OF TECHNICAL SPECIALTIES

- 15. *Olga Kravchuk, Cand. Sc.*, Lesya Ukrainka Volyn National University, Lutsk, Ukraine
 ANALYTICAL GEOMETRY AS A MEANS OF FORMING PROFESSIONAL-PEDAGOGICAL COMPETENCES OF FUTURE MATHEMATICS TEACHERS
- 16. **Olga Shvai, Cand. Sc.,** Lesya Ukrainka Volyn National University, Lutsk, Ukraine
 CREATING TASKS OF PATRIOTIC CONTENT AS AN ELEMENT OF FUTURE TEACHERS PROFESSIONAL TRAINING

SECTION C

7. METHODS OF TEACHING MATHEMATICS AND COMPUTER SCIENCE IN SECONDARY EDUCATION

Friday, May 2, 2025, Google Meet connection

https://meet.google.com/jwf-zvzg-jfb

Chair Yaroslav Krupskyi, Cand. Sc. Secretary Alina Klimishyna, Cand. Sc.

- 1. 10:00- *Dmytro Hrytsaiuk*, Whaleapp LTD, Kyiv, Ukraine, Vinnytsia 10:15 Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine; *Olena Soia, Cand. Sc.*, Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine THE ROLE OF THREE-DIMENSIONAL MODELING IN THE DEVELOPMENT OF CRITICAL AND SPATIAL THINKING OF STUDENTS
- 2. 10:15— Tetyana Ivatsko, Ph. D., State Vocational Education Institution 10:30 "Higher Vocational School №7 of Vinnytsia", Ukraine; Yaroslav Krupskyi, Cand. Sc., Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine APPLICATION OF FORMATIVE ASSESSMENT METHODOLOGY IN COMPUTER SCIENCE LESSONS DURING THE FORMATION OF PROFESSIONAL COMPETENCES OF STUDENTS
- 3. 10:30– *Alina Klimishyna, Cand. Sc.*, Vinnytsia Mykhailo Kotsiubynskyi State 10:45 Pedagogical University, Vinnytsia, Ukraine, lyceum of the village of Ivaniv, Ukraine

 DEVELOPING PROBABILISTIC THINKING IN STUDENTS DURING THE STUDY OF MATHEMATICS IN GENERAL SECONDARY EDUCATION INSTITUTIONS
- 4. 10:45– *Olga Kolomiets*, Center for Professional Development of Teachers of 11:00 Kalynivka City Council, Vinnytsia Oblast, Kalynivka, Ukraine DEVELOPMENT OF SCIENTIFIC AND TECHNICAL DIRECTION IN THE EDUCATIONAL AND METHODOLOGICAL ACTIVITIES OF LYCEUMS THROUGH STEM EDUCATION
- 11:00- Olena Kosovets, Cand. Sc., Vinnytsia Mykhailo Kotsiubynskyi State
 11:15 Pedagogical University, Vinnytsia, Ukraine
 SPECIFICS OF TEACHING BLIND STUDENTS TO PROCESS
 TABLE DATA
- 6. 11:15– *Olena Kosovets, Cand. Sc., Volodymyr Krupka,* Vinnytsia Mykhailo 11:30 Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine GAME-BASED LEARNING METHODS IN COMPUTER SCIENCE

- LESSONS AT A VOCATIONAL SCHOOL
- 7. 11:30- Olga Kravchuk, Cand. Sc., Anna Aleksandruk, Lesya Ukrainka
 - 11:45 Volyn National University, Lutsk, Ukraine
 INFORMATION AND COMMUNICATION TECHNOLOGIES AS
 A MEANS OF INCREASING MOTIVATION IN MATHEMATICS
 LESSONS IN 5TH GRADE
- 8. 11:45– *Olga Kravchuk, Cand. Sc., Sofiia Moroz,* Lesya Ukrainka Volyn 12:00 National University, Lutsk, Ukraine USE OF INNOVATIVE TECHNOLOGIES WHEN STUDYING TOPIC «EQUATION OF A CIRCLE» AT SCHOOL
- 9. 12:00-Olga Kravchuk, Cand. Sc., Angelina Panasiuk, Lesya Ukrainka Volyn National University, Lutsk, Ukraine 12:15 COMPARATIVE **ANALYSIS METHODOLOGICAL APPROACHES** TO THE STUDY OF **ELEMENTS** OF ANALYTICAL GEOMETRY IN ZZSO AND HIGHER SCHOOL USING ICT: THE TOPIC «PLANE EQUATIONS»
- 10. 12:15— Pavlo Shevchuk, Horodkivka Lyceum No. 2, Horodkivka Village 12:30 Council, Tulchyn District, Vinnytsia Region; Olena Soia, Cand. Sc., Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine SYSTEM APPROACH TO MODELING INDIVIDUAL TRAJECTORY OF INFORMATICS TEACHER'S PROFESSIONAL DEVELOPMENT

Poster talks

- 11. **Tetiana Dumanska, Cand. Sc.,** Kamianets-Podilskyi Ivan Ohiienko National University, Ukraine
 THE PLACE OF INTERACTIVE WORDWALL ACTIVITIES IN A MATHEMATICS LESSON
- 12. **Yurii Hera,** Secondary School No. 97, Lviv, Ukraine FOSTERING CREATIVITY IN SPECIALIZED SECONDARY SCHOOL STUDENTS THROUGH ACTIVE LEARNING IN COMPUTER SCIENCE CLASSES
- 13. **Volodymyr Korolskyi, Cand. Sc.,** Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine ON THE METHODS OF CALCULATING THE NUMBER π
- 14. *Olga Kravchuk, Cand. Sc., Anna Nykytiuk,* Lesya UkrainkaVolyn National University, Lutsk, Ukraine DIFFERENTIATED APPROACH TO TEACHING DIFFERENTIAL EQUATIONS IN SPECIALIZED CLASSES
- 15. *Alina Voievoda, Cand. Sc., Mykhailo Prytuliak,* Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine PSYCHOLOGICAL AND PEDAGOGICAL PREREQUISITES FOR THE USE OF COMPUTER DIDACTIC GAMES IN THE PROCESS OF TEACHING MATHEMATICS

V International Scientific and Practical Internet Conference
«Mathematics and Informatics in Science and Education: Challenges of Modernity

May 1-2, 2025, Vinnytsia, Ukraine

CONFERENCE PROGRAM

Compiled by Serhii Bak and Halyna Kovtoniuk