



INFORMATION TECHNOLOGIES:
THEORETICAL AND APPLIED
PROBLEMS
(ITTAP-2021)

November 16-18, 2021
Ternopil, UKRAINE

The 1st International Workshop

<https://ittap.tntu.edu.ua/>

CONFERENCE PROGRAMME



Ternopil Ivan Puluj National
Technical University
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Journal of Sustainable
Development of Transport and
Logistics
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Journal

<https://jsdtl.sciview.net/>
ISSN 2520-2979
DOI: 10.1425/jsdtl

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ITTAP 2021 General Timetable

November 16		
	9:50-10:00 (10)	Conference opening
1	10:00-10:10	<i>Vladyslav Khaidurov, Tamara Tsiupii and Tetiana Zhovnovach.</i> Modelling of Ultrasonic Testing and Diagnostics of Materials by Application of Inverse Problems
2	10:10-10:20	<i>Serhii Hilgurt.</i> A Survey on Hardware Solutions for Signature-Based Security Systems
3	10:20-10:30	<i>Vitalii Babak, Leonid Scherbak, Yurii Kuts and Artur Zaporozhets.</i> Information and measurement technologies for solving problems of energy informatics
4	10:30-10:40	<i>Sergey Kharchenko, Vitaliy Babak, Nataliy Fialko and Vitaliy Shchepetov.</i> The physical model of the thermodynamic conditions of the friction system of self-regulation
5	10:40-10:50	<i>Kateryna Vasiuk, Olena Karelina, Valerii Muzh and Liliana Dzhydzhora.</i> Open Source Intelligence Telegram-bot development
6	10:50-11:00	<i>Roman Yuzefovych, Ihor Javorskyj, Oleh Lychak, George Trokhym and Pavlo Semenov.</i> Bi-periodically correlated random processes as a model for gear pair vibration
7	11:00-11:10	<i>Gennady Chuiko, Yevhen Darnapuk, Olga Dvornik and Yaroslav Krainyk.</i> Improved robust handling of electromyograms with mining of new diagnostic signs
8	11:10-11:20	<i>Nataliia Shybytska.</i> Identification of Dynamical System's Parameters Using Neural Networks
9	11:20-11:30	<i>Kyrylo Smetanin, Oleksii Lebid, Vasyl Trysnyuk, Ihor Humeniuk, Oleksii Samchyshyn, Viktor Shumeiko and Taras Trysnyuk</i> User authentication method information and telecommunication systems based on cascading multimodal biometric identification
	11:30-12:00 (30)	Coffee brakes
10	12:00-12:10	<i>Svitlana Terenchuk, Yuliia Riabchuna, Nataliia Poltorachenko, Iryna Aznaurian and Daoud Mezzane.</i> Identification of the Entrant's Abilities on the Basis Fuzzy Inference Systems
11	12:10-12:20	<i>Oleh Pihnastyi, Olga Kozhyna and Tetiana Kulik.</i> Choosing the Optimal Quantity of Factors for Prediction the Severity of Bronchial Asthma in Children Using Linear Regression Models
12	12:20-12:30	<i>Serhii Lupenko, Iaroslav Lytvynenko, Volodymyr Hotovych, Oleg Nazarevych and Grigorii Shymchuk.</i> Simulation of gas consumption process based on the new mathematical model in the form of cyclic random process considering the scale factors
13	12:30-12:40	<i>Halyna Osukhivska, Taras Lobur, Mykola Khvostivskyy, Liliya Khvostivska, Diana Velychko, Tetiana Hovorushchenko and Serhii Lupenko</i> Mathematical modelling of daily computer network traffic
14	12:40-12:50	<i>Olena Karelina and Taras Lobur.</i> Development of the strategy for selection of information-communication system security tools based on game theory
15	12:50-13:00	<i>Olga Mezentseva, Kateryna Kolesnikova and Anna Kolomiets.</i> Customer Churn Prediction in the Software by Subscription models IT business using machine learning methods
16	13:00-13:10	<i>Mykhailo Fryz, Leonid Scherbak and Bogdana Mlynko.</i> Characteristic Function of Conditional Linear Random Process

17	13:10-13:20	<i>Serhii Tsyurulnyk, Tromsuk Volodymyr, Maksym Tsyurulnyk and Pavlo Rymar.</i> Energy Monitoring System based on IoT
18	13:20-13:30	<i>Rustam Gamzayev, Mykola Tkachuk and Oleksand Nelipa.</i> Domain-Specific Language for Adaptive Development of "Smart- Home" Applications
19	13:30-13:40	<i>Artur Zaporozhets and Anastasia Sverdlova.</i> Photovoltaic technologies: problems, technical and economic losses, prospects

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7	11:00-11.10	<i>Yurii Turbal, Sergii Babych, Larysa Bachyshyna, Nataliia Kunanets and Nataliia Kovalchuk.</i> Modification of the Permanent Decomposition Method for the Meeting Shedule Problem
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11	12:10-12:20	<i>Oleksandr Kramar, Yuriy Skorenkyy, Oleksandr Rokitskyi and Taras Kramar.</i> Application of Virtual and Augmented Reality Technologies for Creation of a Digital Museum of Scientific and Cultural Heritage of Ivan Pulu
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14	12:40-12:50	<i>Olena Dyagileva, Mariia Masonkova, Alla Paziak and Alona Yurzhenko.</i> Intelligent Information Technology in the System of Teachers' Advanced Training

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November 18	
10:00-10:15	Final session

TIME FOR PRESENTATIONS

Paper presentation at the regular session – 5 min.

Discussion, questions – 5 min.



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Link Conference: <https://tube5.tntu.edu.ua/b/2ha-11w-t2g-lco>

YouTube: <https://www.youtube.com/channel/UCn3iBiVcrCCDooKSJTD2pww>

Conference opening

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Final session

10:00-10:15

1. Conference summary. Discussion of the presented papers.
2. Meeting of the participants, Program and Organizing Committees. Feedbacks on the conference. Discussion on the possible ways of improvement for future.



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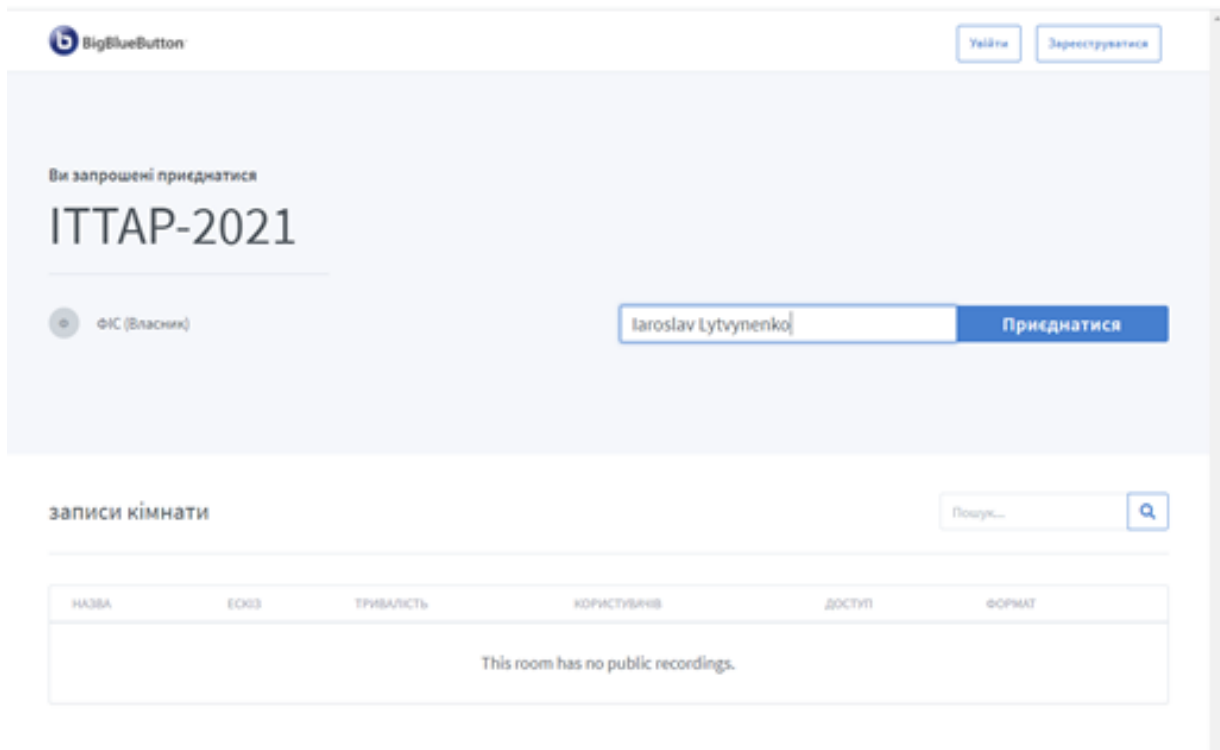
Note.

Dear colleagues!

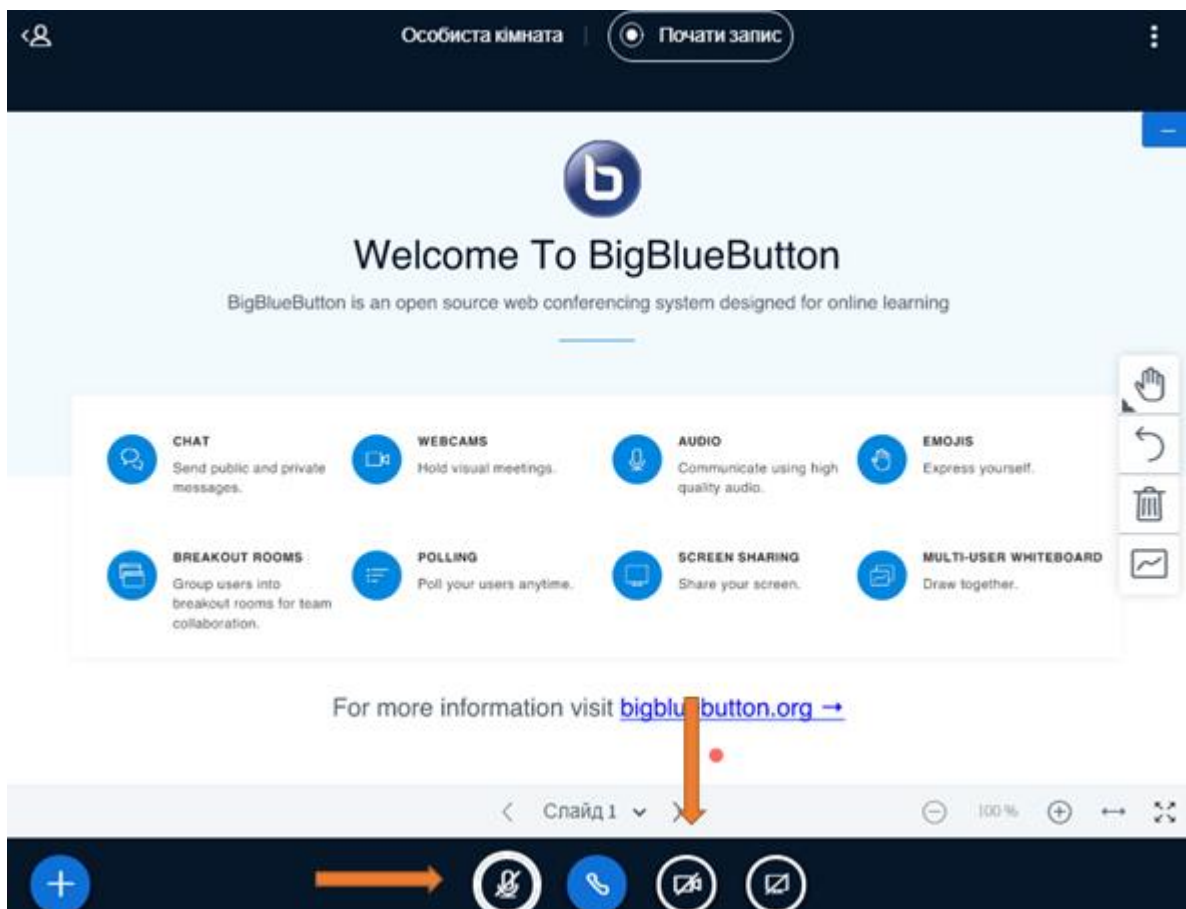
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1. Enter first and last name

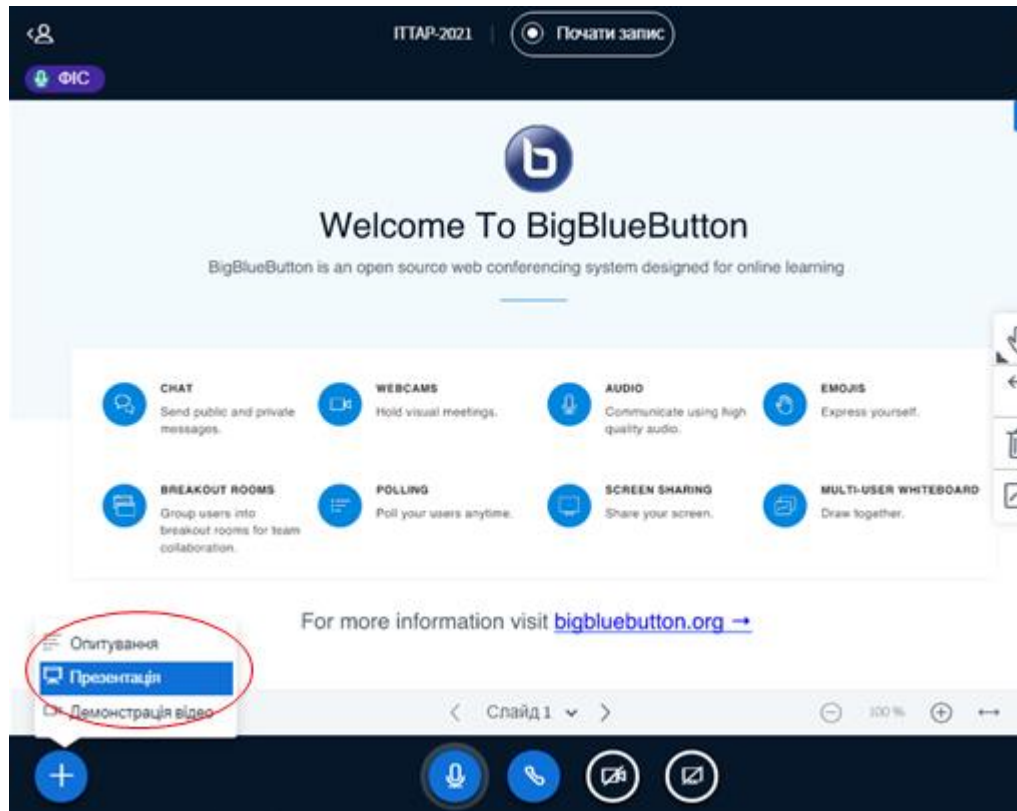


2. Due to the possible large number of conference participants, please turn off the microphones and cameras during free time from reports and questions.

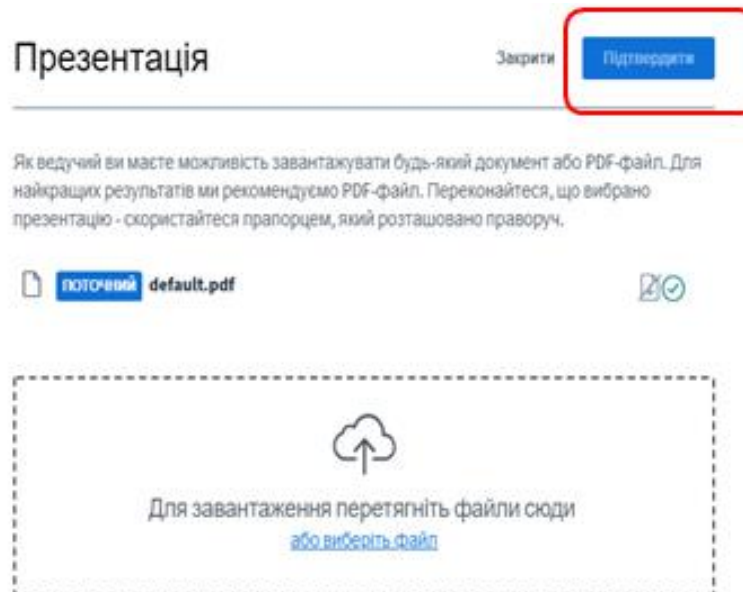
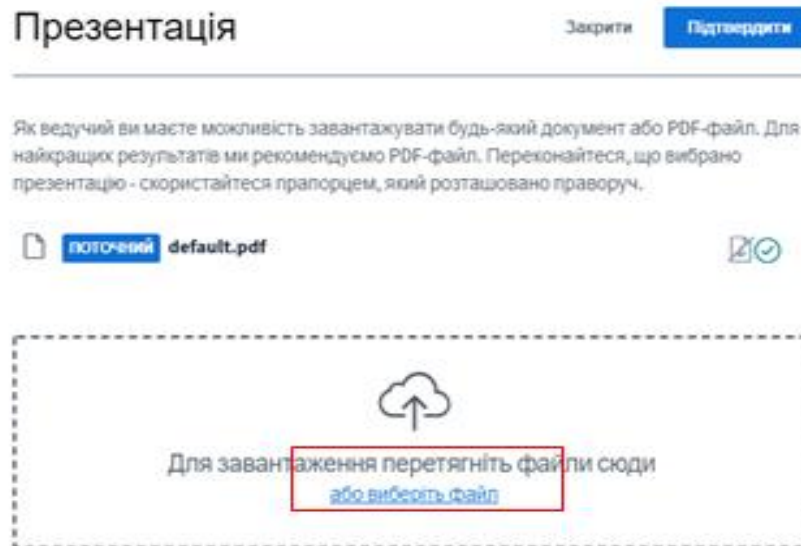


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3. The speaker will be given the rights of a presenter to present the report



4. To download materials (video, presentation) use the appropriate option:



In case of technical problems, use the telegram <https://t.me/joinchat/YuFh6Dyuj-wxZGRi>