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RĪGAS TEHNISKĀ UNIVERSITĀTE

CYBPHYS

Development of practically-oriented student-centred education in the field of modelling of Cyber-Physical Systems - CybPhys

CybPhys: Management meeting and WS

Zoom meting

January 12th 2021

Anatolijs Zabashta
Project coordinator
Riga Technical University

Agenda of the meeting

- Information about the status
- **1. Development and modernizing of curricula (WP2)**
- **2. Elaboration of e-books**
- Other questions
  - Quality Assurance teams at the partner’ universities
- Next meetings

English Language course: First training session on January 11th

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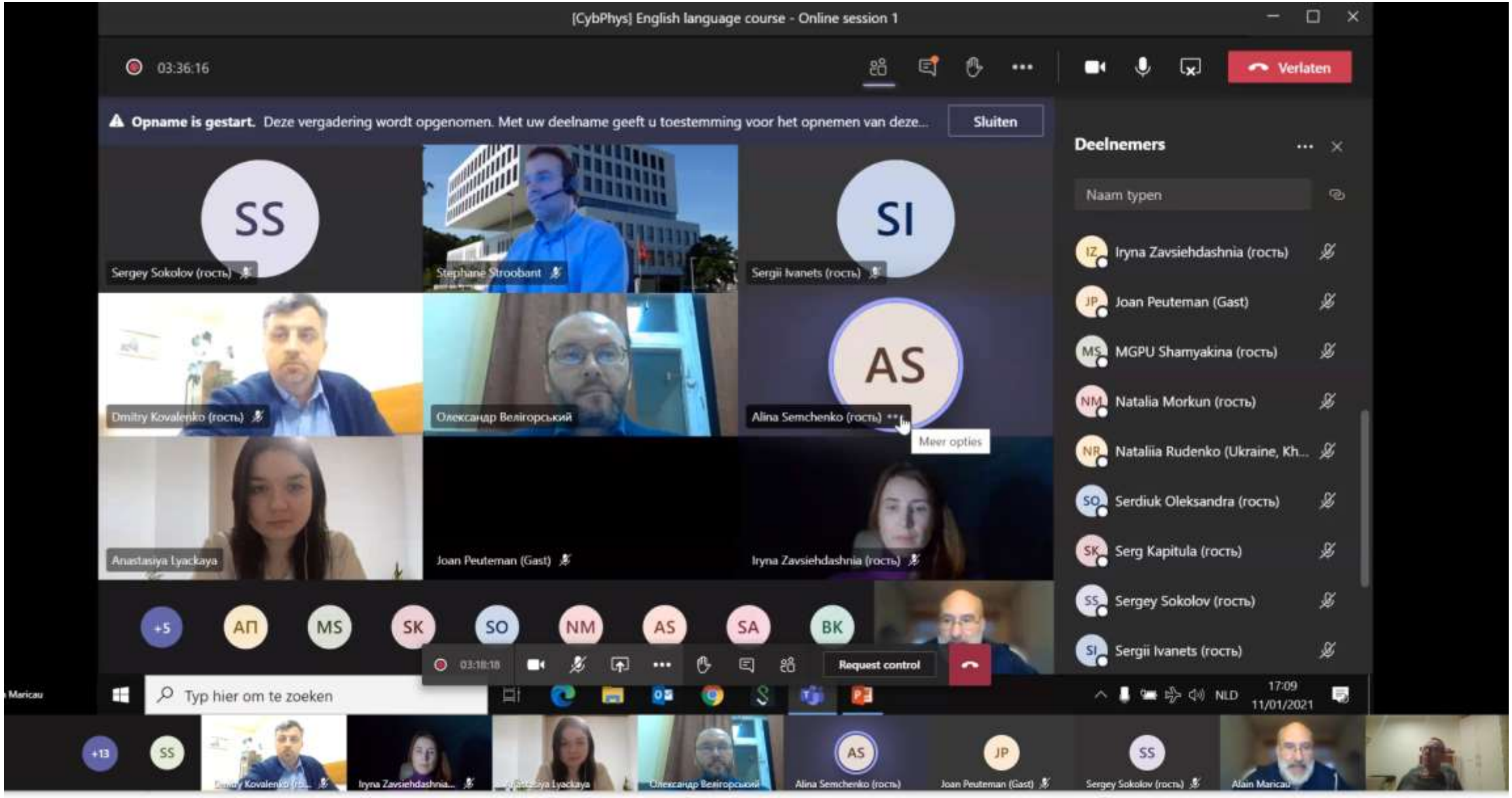


Project progress

- The first English language lesson for team members was held yesterday. 26 participants (22 of them are students)
- A new project team member of the Cyprus team: associate professor **Irina Ciornei**, Research Associate, the list of the contact persons is available: https://eduphys.bsu.by/mod/folder/view.php?id=2248
- Process of accreditation in Belarusian Government. Forecast on February?
- Ukrainian partners are closed to the finish concerning purchase of equipment.
- Monitoring meeting of Belarusian NEO on December 10th – No feedback.
- RTU – KhNAHU: discussions about Double Diploma master program are on the way.
- Decision about WP4: A meeting of the Working group will be arranged remotely in January.

Courses and programs: new / updated

- BSU: courses 11/2; Programs 1/1
- GSU: courses 10/2
- MSPU: courses 4/1
- CNTU: Courses 5/2; Programs 1
- KhNTHU: Courses 2/4; programs 1
- KNU: courses 3/4; programs 1

Total: courses Belarus 25/5 and Ukraine 10/10 = 35/15 = 50

What we promissed! *Indicators 1*

- Expected number of new/updated courses to be DEVELOPED/ ACCREDITED/ IMPLEMENTED: **50**
- Volume (in ECTS) of new/updated courses: **240**
- Number of planned learners enrolled per course delivery: **15**
- Expected number of partner country "HEIs' students" to be trained: **420**
- Expected number of partner country "HEIs' academic staff" to be trained: **120.**
- Expected number of partner country "non-HEI individuals" to be trained (priv. sector, NGOs, civil servants, etc.): **4**

Indicators 2

- Number of direct beneficiaries in the Partner countries per year: academic staff from HEIs: **102**
- Number of direct beneficiaries in the PCs (/year): students: **140**
- Number of direct beneficiaries in the PCs (/year): non HEs individuals: **16**
- % of the new curriculum planned to be taught in foreign language of the total of new curriculum developed by the project: 20%

New teaching books

1. Bringing innovations to the market – RTU, GSU
2. Mathematical Modelling of Mechatronic Systems – KU Leuven
3. Model-oriented control in Intelligent Manufacturing Systems – CNUT
4. Modern Mathematical Physics: Fundamentals and Application – BSU
5. High-Performance Scientific Computing and Data Analysis – BSU
6. Cyber-Physical Systems modelling and simulation – UCY
7. Cyber-Physical Systems for Clean Transportation – KNAHU
8. Control methods for critical infrastructure and Internet of Things (IoT) systems interdependencies analysis – RTU
9. Computer modeling of physical processes (handbook for students and PhD students) MSPU (Aleksandr Makarevich)

The status of e-books in E-library

was checked on January 10th

1. Bringing innovations to the market – N.Kunicina. RTU, GSU.

A draft 140 pages. Some chapters to be written. It necessary to allocate at e-library.

2. **Mathematical Modelling of Mechatronic Systems** – KU Leuven. J.Peuteman.

5 partners: UCY, RTU, GSU, BSU. A lot of materials! Ch. 1-13, in English.

3. **Model-oriented control in Intelligent Manufacturing Systems** – CPNU. V.Kazymir.

CPNU and RTU. Chapters 1-3 are ready in English. Chapters 4-8 to be written.

4. **Modern Mathematical Physics: Fundamentals and Applicati**on – BSU. Natalya G. Abrashina-Zhadaeva.

Only BSU authors. 5 chapters are allocated in e-library. The contents of the book (names of the chapters) is not available. Materials are Russian language, slides and text files. Chapter 1-3 are ready. Ch. 4-8 to be developed?

5. **High-Performance Scientific Computing and Data Analysis** – BSU. Vasily Volkov, Oleg Romanov

2 partners: BSU and RTU (Arnis Lektauers). Only a Plan of the book is found in the e-library!

6. **Cyber-Physical Systems modelling and simulation** – UCY. Nikolas Flourentzou / Irina Ciornei. 5 partners, 9 chapters, ch. 6-9 drafts are uploaded into the e-library. The draft of the book 6 is available in e-library (partial).

7**. Cyber-Physical Systems for Clean Transportation** – KNAHU. A.Gnatov.

4 partners. 10 chapters. All chapters drafts are uploaded into e-library: Ukrainian, Russian and English.

8. **Control methods for critical infrastructure and Internet of Things (IoT) systems interdependencies analysis** – RTU. N.Kunicina.

3 partners. A draft of 148 pages is available in Word, English version. The draft is not uploaded to the e-library.

9. **Computer modeling of physical processes** (handbook for students and PhD students) MSPU (Aleksandr Makarevich).

Total 8 chapters. 6 partner’ universities participate. Only ch. 2 is available on e-library, in Russian.

WP 5 Quality Assurance:

5.1. Quality Assurance plan with milestones

5.2. Development of a Project Manual.

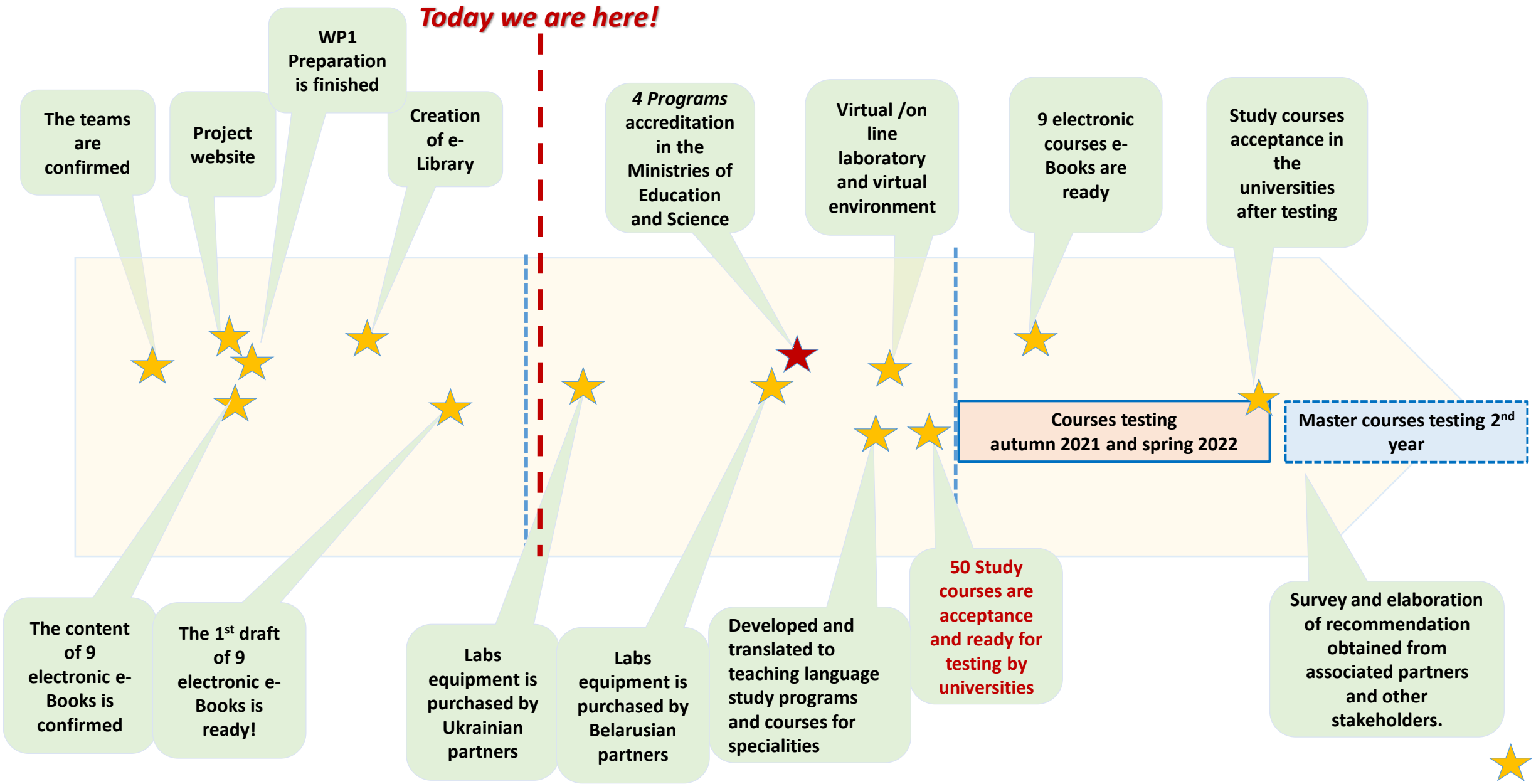
5.3. Establish Quality Assurance and Monitoring Team.

- **Partner' internal QAMTs**
- **Reporting about QA at the project meetings**

5.4. Following up the project progress, corrective actions

5.5. Quality Assurance setup, assessment and monitoring.

Deliverables schedule 2019-22



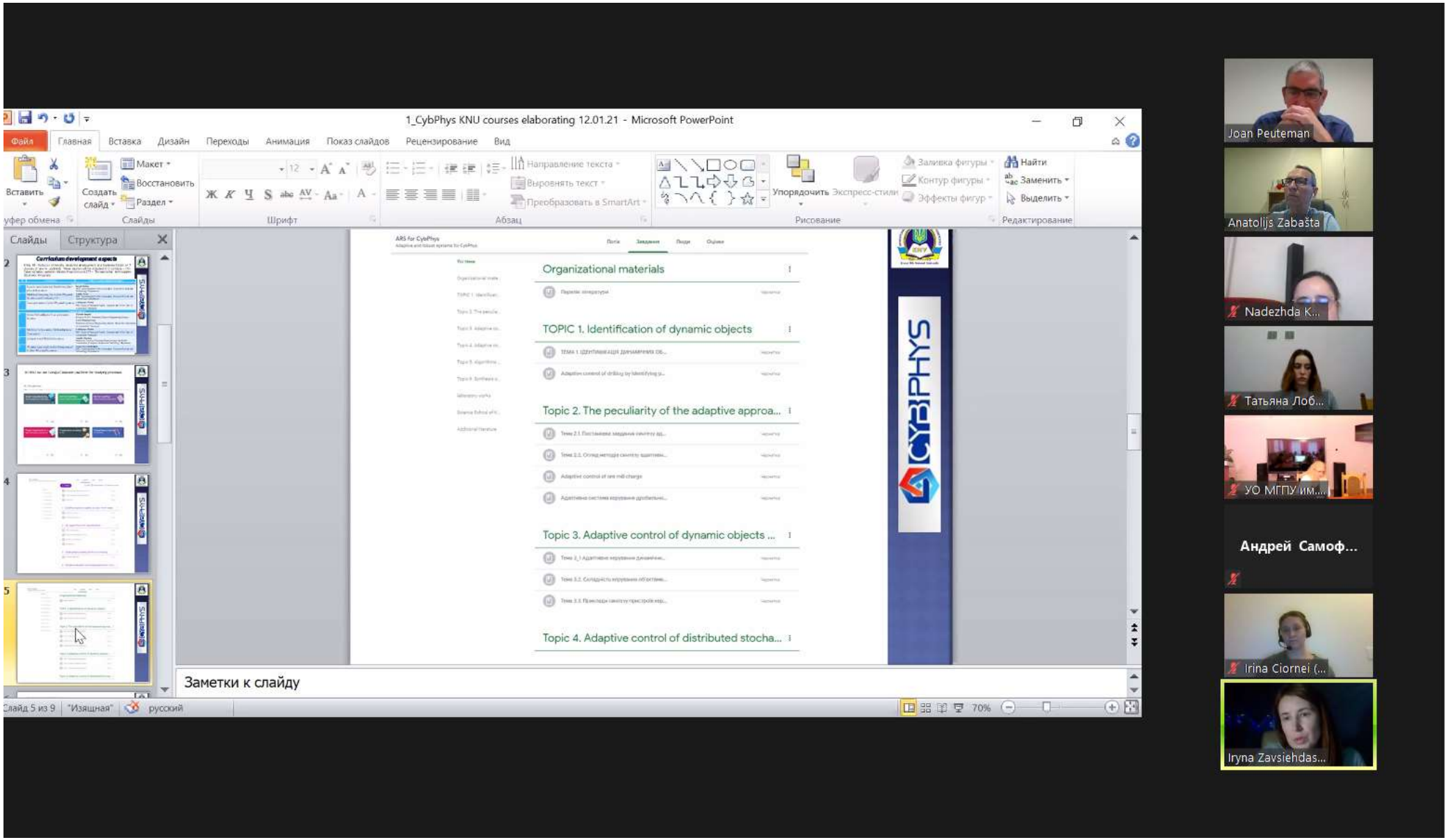
Next meeting schedules

Suggested dates for the next meetings:

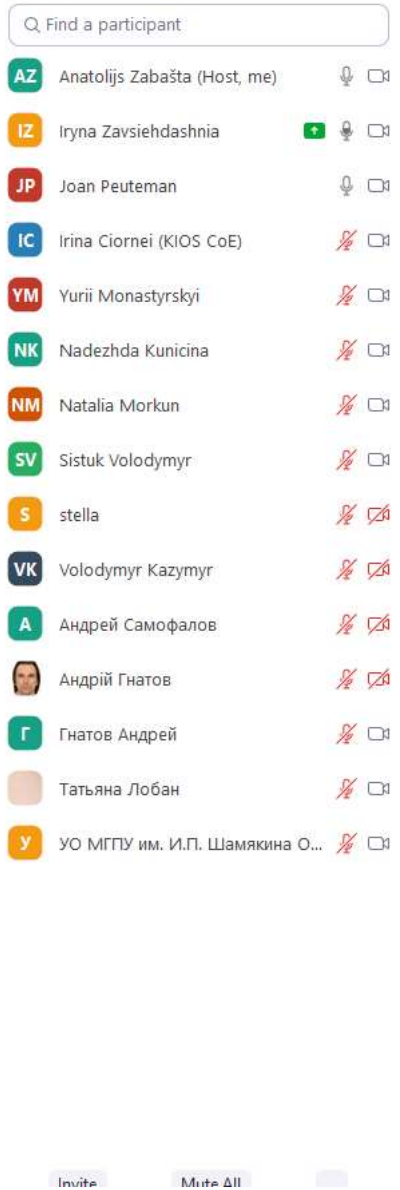
- February 8
- March 1

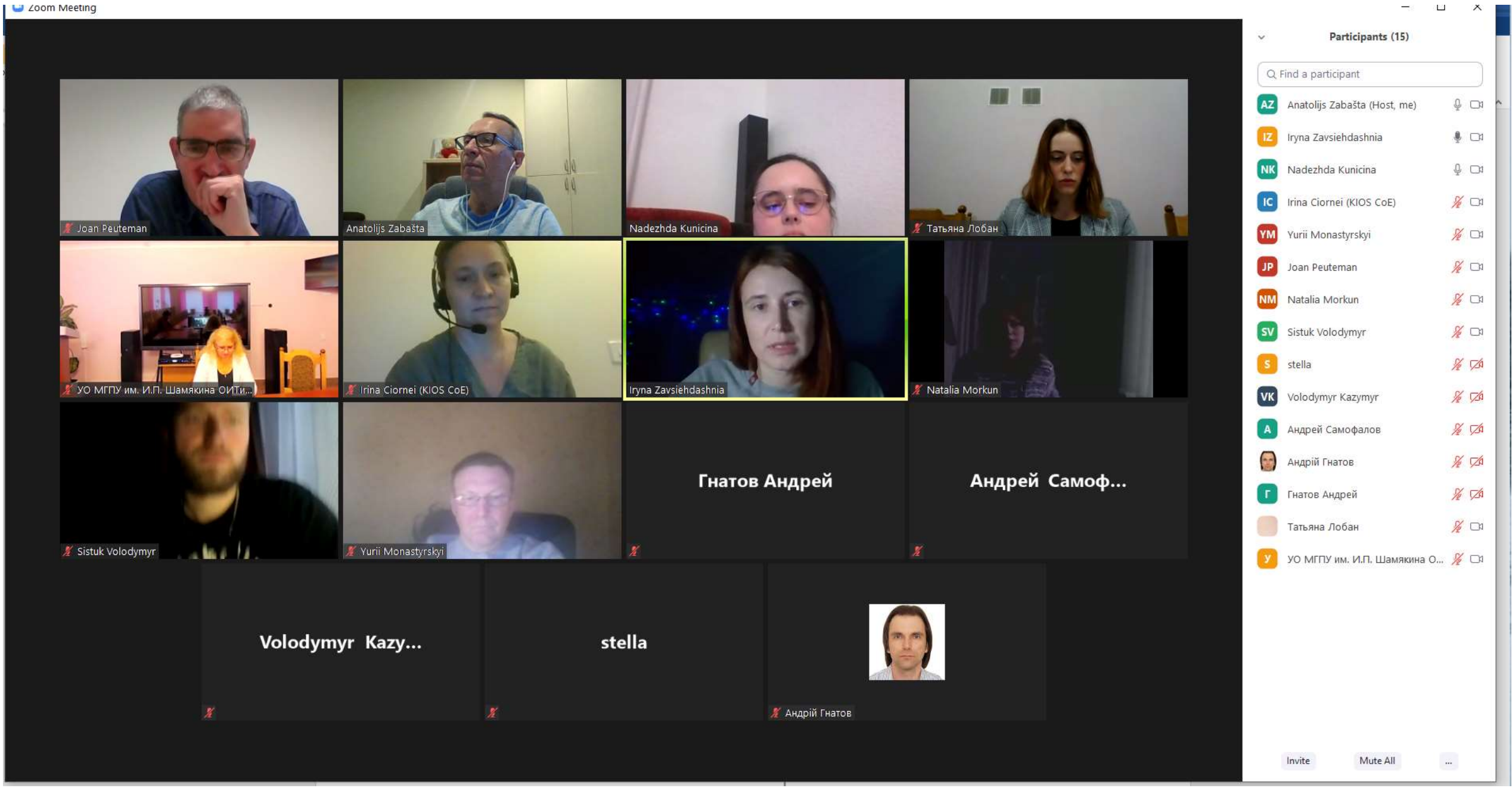
Tuesday February 8th:

1. Development and modernizing of curricula (WP2)
2. e-books
3. Students training.


1_CybPhys KNU courses elaborating 12.01.21 - Microsoft PowerPoint
Файл
Главная
Вставка
Дизайн
Переходы
Анимация
Показ слайдов
Рецензирование
Вид
Слайды
Структура
Organizational materials
TOPIC 1. Identification of dynamic objects
Topic 2. The peculiarity of the adaptive approa...
Topic 3. Adaptive control of dynamic objects ...
Topic 4. Adaptive control of distributed stocha...
CYBPHYS
Заметки к слайду
Слайд 5 из 9
"Изящная"
русский
70%

Joan Peuteman
Anatolijs Zabašta
Nadezhda K...
Татьяна Лоб...
УО МГПУ им....
Андрей Самоф...
Irina Ciornei (...
Iryna Zavsiehdas...


Find a participant
AZ Anatolijs Zabašta (Host, me)
IZ Iryna Zavsiehdashnia
JP Joan Peuteman
IC Irina Ciornei (KIOS CoE)
YM Yurii Monastyrskyi
NK Nadezhda Kunicina
NM Natalia Morkun
SV Sistuk Volodymyr
S stella
VK Volodymyr Kazymyr
A Андрей Самофалов
Андрій Гнатов
Г Гнатов Андрей
Татьяна Лобан
У УО МГПУ им. И.П. Шамякина О...
Invite
Mute All


Zoom Meeting
Joan Peuteman
Anatolijs Zabašta
Nadezhda Kunicina
Татьяна Лобан
УО МГПУ им. И.П. Шамякина ОИТи...
Irina Ciornei (KIOS CoE)
Iryna Zavsiehdashnia
Natalia Morkun
Sistuk Volodymyr
Yurii Monastyrskyi
Гнатов Андрей
Андрей Самоф...
Volodymyr Kazy...
stella
Андрій Гнатов
Participants (15)
Find a participant
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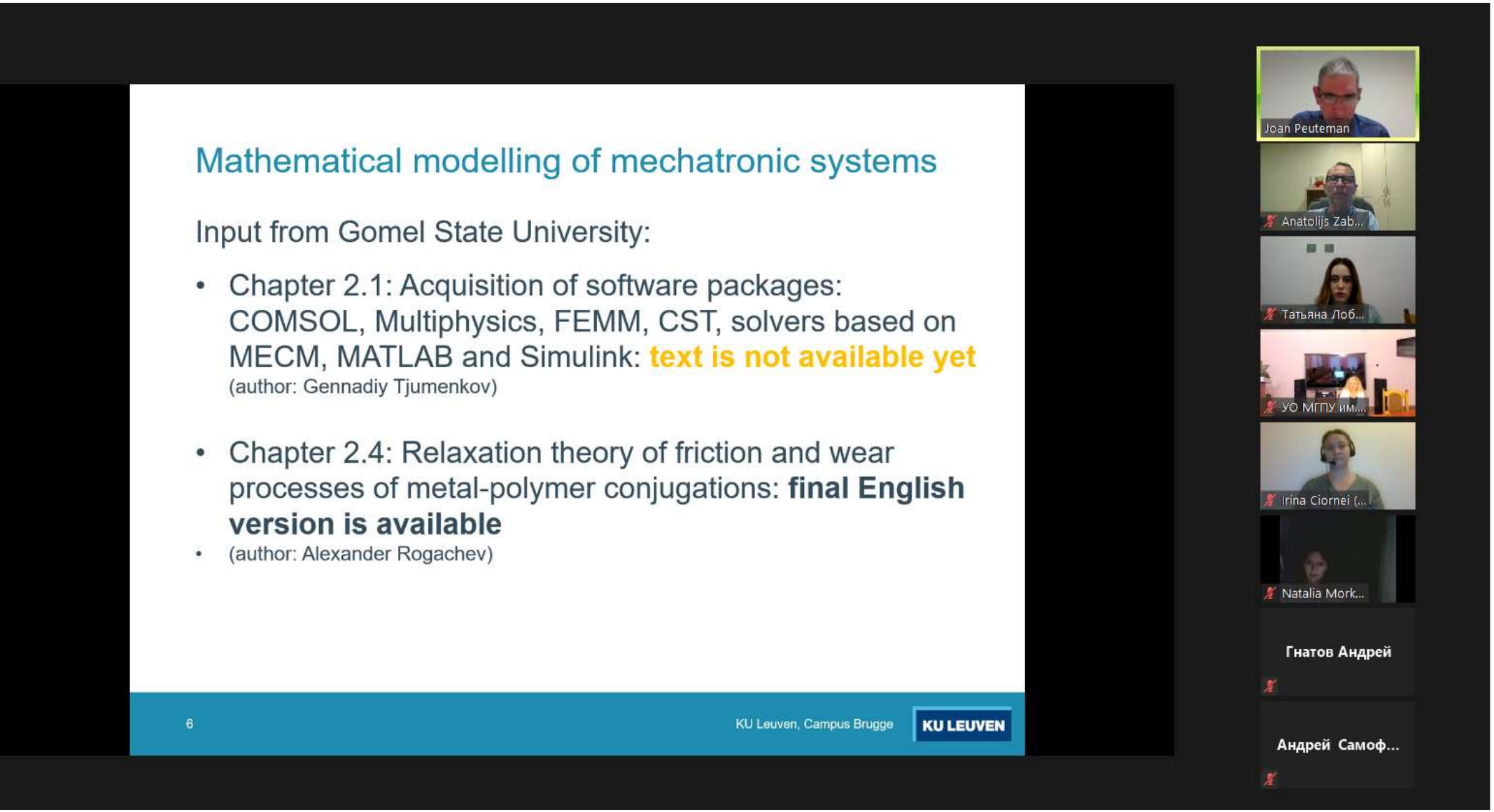
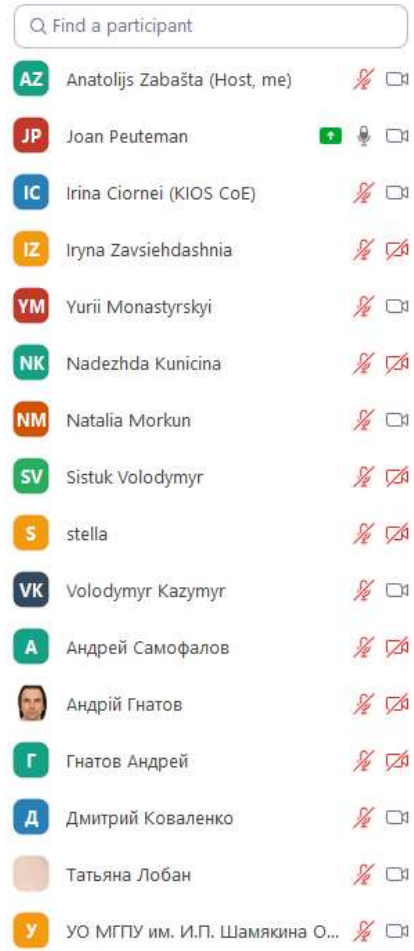

Mathematical modelling of mechatronic systems
Input from Gomel State University:
• Chapter 2.1: Acquisition of software packages: COMSOL, Multiphysics, FEMM, CST, solvers based on MECM, MATLAB and Simulink: text is not available yet
(author: Gennadiy Tjumenkov)
• Chapter 2.4: Relaxation theory of friction and wear processes of metal-polymer conjugations: final English version is available
• (author: Alexander Rogachev)
6
KU Leuven, Campus Brugge
KU LEUVEN
Joan Peuteman
Anatolijs Zab...
Татьяна Лоб...
УО МГПУ им....
Irina Ciornei (...
Natalia Mork...
Гнатов Андрей
Андрей Самоф...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Thank you!
Questions?