





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

CybPhys: Management meeting and WS Zoom meting February 8th 2021

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Agenda of the meeting

- Information about the status
- 1. Elaboration of e-books (WP2)
- 2. Teachers and students training arrangement.
- Other questions
 - Quality Assurance teams at the partner' universities
 - Dissemination issues
- Next meetings

Project progress

- WP4: A meeting of the Working group was arranged on February 3rd. 18 persons took part in the WS (excepted KhNAHU).
- The *list of the contact persons* is available on "Partners agreements": <u>https://eduphys.bsu.by/mod/folder/view.php?id=2248</u>
- Process of accreditation in Belarusian Government. Forecast on February?
- Feedback on monitoring arranged by Ukrainian NEO: "*Please provide the Agency with information on how you have addressed the before mentioned points at the latest when sending your interim report*".
- Monitoring meeting of Belarusian NEO on December 10th No feedback.
- RTU KhNAHU: discussions about Double Diploma master program are on the way.

The working group meeting on SMSE on February 3 The next Zoom meeting will be held in two weeks, at 15.00 on Minsk time, Wednesday of February 17.



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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 has been checked on February 8th

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.

Mathematical Modelling of Mechatronic Systems – KU Leuven. J.Peuteman.
 partners: UCY, RTU, GSU, BSU. A lot of materials! Ch. 1-14, in English. DEMO COURSE: CHAPTER 1-15

Model-oriented control in Intelligent Manufacturing Systems – CPNU. V.Kazymir.
 partners: CPNU and RTU. Chapters 1-5 are ready in English. Chapters 6-8 to be written.

4. Modern Mathematical Physics: Fundamentals and Application – BSU. Natalya G. Abrashina-Zhadaeva. Only BSU authors. Materials of 5 chapters are allocated in e-library. The contents of the e-book (names of the chapters) is not available! Materials are on Russian language, are presented as slides and text files.

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 (9 chapters) is found in the e-library!

6. **Cyber-Physical Systems modelling and simulation** – UCY. Irina Ciornei. 5 partners, 9 chapters, All chapters are uploaded into the e-library. The draft of the book 6 is available in e-library, in English. Very good job!

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.

4 partners (RTU, KU Leuven, BSU, Kaunas TU). A draft of 148 pages is available in Word, English and Latvian languages. The 1st draft is uploaded to the e-library.

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

Total 9 chapters. 6 partner' universities participate. Ch. 5 and 7 are missed from-library. Ch.9 is in English, other chapters are in Russian.

Other questions:

Quality Assurance teams at the partner' universities

5.3. Establish Quality Assurance and Monitoring Team.

Partner' internal QAMTs

Reporting about QA at the project meetings

Other questions: Dissemination

For CybPhys homepage https://cybphys.rtu.lv/

Each partner send at least one material per month to A.K. Fedotov. Hten he elaborates and sent to RTU team for publishing

Next meeting schedules

Suggested dates for the next meetings:

- March 1st
- April

Monday March 1st:

- 1. Development and modernizing of curricula (WP2)
- 2. Development of SMSE platform

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Thank you! Questions?