

International Research Seminar

Smart Sensorics: The Problem of Monitoring the Movement and Its Applications

<https://conf.petrSU.ru/page/?id=661>

Jointly by Technological University of Havana (Cuba) and Petrozavodsk State University (Russia)

For PhD students of TUH and PetrSU

TUH:

- Faculty of Telecommunications
Dr. Fidel Ernesto Hernández Montero, Vice Dean for Research and Postgraduate Studies

PetrSU:

- Institute of Mathematics and Information Technology
Dmitry G. Korzun, Adjunct Professor, Deputy Director for Research
- Institute of Physics and Technology
Alexei P. Moschevikin, Leading Research Scientist
- Professor A.P. Zilber Medical Institute
Dr. Alexander Yu. Meigal, Professor, Head of Department of Human and Animal Physiology, Pathophysiology

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April 25, 2026 (Saturday)

16:00-18:30 MSK (GMT+3), 09:00-11:30 Havana, Cuba (GMT-4).

Onsite: Aud. 153, Lenin Ave., 33, Petrozavodsk, Russia

Online: [Link to Jitsi](#)

Description

- Students present their R&D ideas and latest results: 7-10 minutes, 7-12 slides.
- Q&A to better understand the presented study: 3-5 minutes.
- Discussion with the aim at finding a joint problem to study collaboratively in our universities. Coining a starting point towards joint publications: 5 minutes

Program

Dmitry Korzun, Adjunct Professor, PetrSU

Towards TUH and PetrSU collaboration. Brief notes on what we do at PetrSU: The problem of digital health assistance in everyday life and industrial conditions

1. Samuel Casanova Calzadilla, PhD student, TUH

Inertial sensor-based wearable device (wireless sensor network node)

2. Mario Bernal Pérez, PhD student, TUH

IMU's-Up: Software manager of a wireless sensor network

3. Osniel Alejandro García Orihuela, PhD student, TUH

Data-logger (portable equipment) for vibration analysis

4. Juan Antonio Delís García, PhD student, TUH

Wireless accelerometer network for machine condition monitoring

5. Elías Osmany García Alvaredo, PhD student, TUH

Artificial Intelligence-based modeling for monitoring physical frailty in elderly people using inertial sensor-based wearable devices

6. Lisandra Pérez Roche, PhD student, TUH

Development of an sEMG probes-based node

7. Olga E. Dyachenko, BSc student, PetrSU

Wireless vibration sensor WVS-2: overview and evaluation experiments

8. Anna S. Sklyarova, MSc student, PetrSU

Digital methods in human physiology

Discussion to find topics for collaboration.

Closing the Seminar