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DEPARTMAN ZA RATARSTVO I  
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UNIVERSITÀ  
DEGLI STUDI  
FIRENZE  
**DISPAA**  
DIPARTIMENTO DI SCIENZE DELLE  
PRODUZIONI AGROALIMENTARI  
E DELL'AMBIENTE



UNIVERSITÄT FÜR  
BODENKULTUR  
WIEN  
**BOKU**  
DEPARTMENT FÜR WASSER-  
ATMOSPHERE-UMWELT



EUROPEAN  
COMMISSION  
**Horizon 2020**  
EUROPEAN UNION FUNDING  
FOR RESEARCH & INNOVATION

# Doctoral School towards Knowledge Based Society

**Silvia Ghilezan**



**Workshop  
2018**

University of Novi Sad  
Faculty of Technical Sciences  
Serbia

# HIGHER EDUCATION

Undergraduate  
education

Master's  
education

**Doctoral  
education**



# DOCTORAL EDUCATION

- Markedly different
- Training and education through original research
- Based on rich tradition of doctoral education

Higher  
Education  
Area

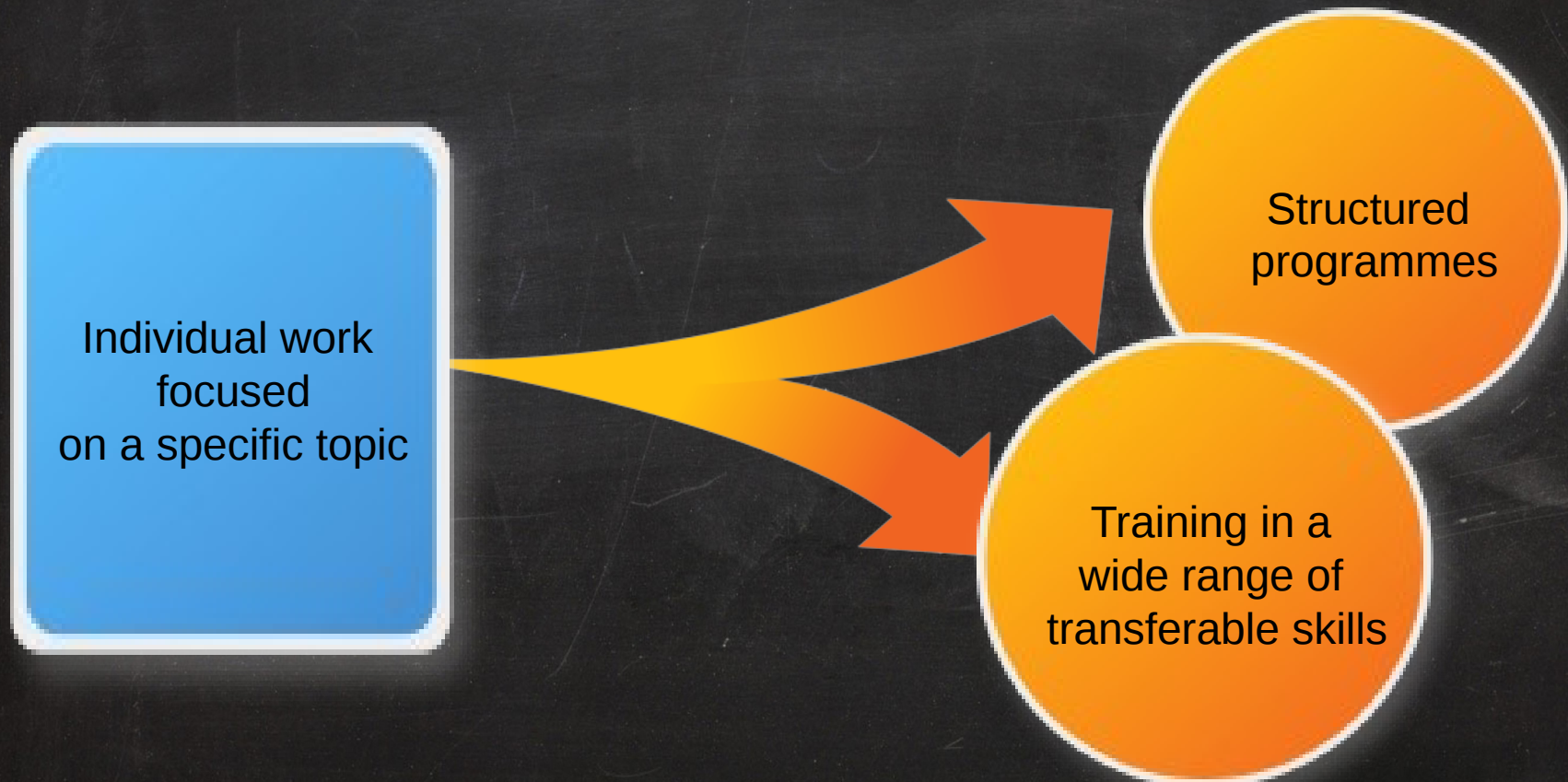
Research  
Area

DOCTORAL EDUCATION



# DOCTORAL EDUCATION IN THE XXI CENTURY

- Reorganization of doctoral programme



# SALZBURG RECOMMENDATIONS FOR DOCTORAL EDUCATION (2005 and 2010)







Serbia for Excell



European  
Commission



Doctoral School towards European Knowledge Society - Main - Deuks - Mozilla Firefox

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http://nblok305.ftn.ns.ac.yu/deuks/

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DEUKS

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**DEUKS**

- Specific Objectives
- Consortium Members
- Partner Country Problem And Needs Analysis
- Presentation Of Consortium
- The Project
- Summary

Outcomes

- Coherent system of Doctoral Programmes Promoted
- Pilot Doctoral Programme in IT developed
- Teaching methods developed
- Research environment for PhD students built
- Dissemination and sustainability
- Quality control and monitoring
- Management

Sites' Activities

News

May 2008, Training

**Main**

## Deuks

### Welcome to DEUKS

*Doctoral School towards European Knowledge Society, Tempus Project JEP - 41099 - 2006*

Main aim of this Project is to promote the current European landscape of doctoral programmes in Serbia.

Particularly, the Project will develop and implement a pilot Doctoral Programme according to the European innovative recommendations with comprehensive approach to information technologies, where foundational theories are fully integrated in a pragmatic engineering approach.

Two more specific goals of the project are: to develop new teaching methods and materials for core courses, trainings in transferable skills, and continuing education, as well as to build a research environment for the Doctoral School linking the EHEA and ERA.

All our aims will be achieved with the help of the Consortium Members:

- [UNIVERSITA DEGLI STUDI DI UDINE \(I\)](#) - Prof. Marina Lenisa (grantholder)
- [UNIVERSITY OF NOVI SAD \(RS\)](#) - Prof. Silvia Ghilezan (co-ordinator)
- [INSTITUT NATIONAL DE RECHERCHES EN INFORMATIQUE ET EN AUTOMATIQUE - Sophia Antipolis \(FR\)](#) - Prof. Luigi Liquori
- [MATHEMATICAL INSTITUTE OF THE SERBIAN ACADEMY OF SCIENCE AND ARTS - Belgrade \(RS\)](#) - Prof. Zoran Ognjanović
- [UNIVERSIDAD POLITECNICA DE VALENCIA - Valencia \(ES\)](#) - Prof. Salvador Lucas

We will have help from Individual experts:

- [Pierre Lescanne, Ecole Normale Supérieure de Lyon](#) and

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start Inbox for sladojen@s... Microsoft PowerPoint ... Doctoral School towa... SV 00:34

<http://cms.uns.ac.rs/deuks/>

Workshop, 2018 Novi Sad

# DOCTORAL PROGRAMME “APPLIED MATHEMATICS”

- Focus of the programme:
  - Cutting-edge research
  - Interdisciplinary training
  - Application
  - Internationalisation
  - Mobility



# INTERNATIONALISATION

## MOBILITY

- TEMPUS (6 students)
  - Universities: Udine, Nice, Valencia
- ERASMUS+
  - Universities: Paris 7, National Technical University of Athens
- ERASMUS+ (master)
  - University: Paris 7

## INTERNATIONAL ASSESSMENT

## JOINT DOCTORATES

- University of Nice (2008)
- University Paris 7
- many more to come



# TAKING SALZBURG FORWARD

- New challenges:
  - Research integrity and research ethics
  - Digitisation, open science, big data, online learning
  - Global research synergy

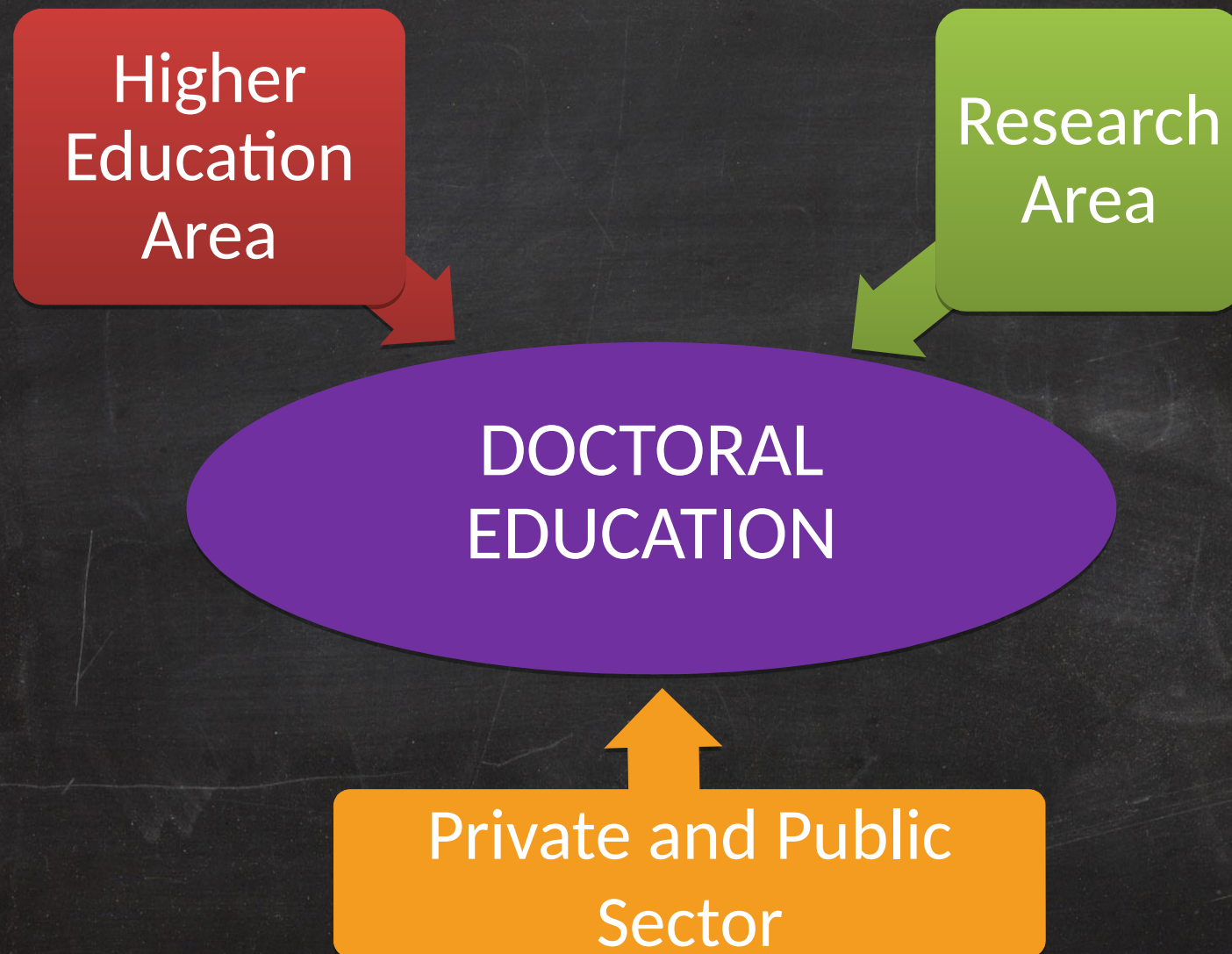




Higher  
Education  
Area

Research  
Area

DOCTORAL  
EDUCATION





# OPEN SCIENCE

- National Portal of Open Science (repository in preparation)  
<http://www.open.ac.rs/>
- Nation Platform for Open Science (legal document in preparation) -  
Law of Scientific and Technological Development
- Repository of public and private companies (in preparation)
- BEOPEN Erasmus+ (pioneer work in open science in Serbia)  
<http://www.beopen.uns.ac.rs/>



# On en revient toujours

- Milutin Milanković (1879-1958)
  - Serbian mathematician, astronomer, climatologist, geophysicist, civil engineer and popularizer of science
  - The explanation of Earth's long-term climate changes
  - **Design of the sewerage system in Belgrade (around 1905)**





# US-SERBIA & WEST BALKAN DATA SCIENCE WORKSHOP

Belgrade, Serbia, August 26-29, 2018

<https://nsfserbia.rs/>

USA: NSF - National Science Foundation  
Temple University

Serbia: Mathematical Institute SASA  
Institute of Archaeology  
Infinity

Ministry of Education, Science and Technological Development

Track 1: Data Science Foundation

Track 2: Data Science in Critical Infrastructures

Track 3: Biomedical Informatics

Track 4: Digital Archaeology

WELCOME!