

# US-EU Workshop on Intelligent Manufacturing



2-4 June 2022 | CIIRC CTU, Prague, Czech Republic

## Thursday, 2 June 2022

8.45 – 9.00	Official Opening by the Members of the Organizing Committee: <b>Růžena Bajcsy</b> , University of Berkeley <b>Vladimír Mařík</b> , CIIRC CTU <b>Wolfgang Wahlster</b> , DFKI
9.00 – 9.40	<b>Wolfgang Wahlster</b> , DFKI, Germany: The Next Decade of Industry 4.0
9.40 – 10.20	<b>Spyros Reveliotis</b> , Georgia Tech, US: Real-time Management of Complex Resources
10.20 – 10.35	Small Ceremonies: <b>Medal of University of Zilina</b> awarded to <i>Prof. Růžena Bajcsy</i> by the Rector of the Univ. Žilina <i>Prof. Jozef Jandačka</i> to memorize the <i>Dr.h.c. degree</i> of this University <b>Memorial Medal of CIIRC CTU</b> awarded to <i>Prof. Růžena Bajcsy</i> by the Director of CIIRC CTU <i>Dr. Ondřej Velek</i> <b>Diploma of the Elected Foreign Member of the Engineering Academy of the Czech Republic</b> - <i>Prof. Wolfgang Wahlster</i> overtakes this diploma from <i>Prof. Petr Zuna</i> , President of EA CR
10.35 – 10.55	<i>Coffee Break</i>
10.55 – 11.35	<b>Julian Florez</b> , Vicomtech, Spain: Industry 4.0 Challenge and Trend: Smart Integration of Human in the Loop and Automation
11.35 – 12.20	<b>Jay Lee</b> , University of Cincinnati, US: AI-Augmented Quality Metrology for Industrial Internet-based Production Systems
12.20 – 13.15	<i>Lunch Break</i>
13.15 – 13.50	<b>Vladimír Mařík</b> , CIIRC CTU, Czech Republic: Beyond Industry 4.0 – Building an AI Ecosystem
13.50 – 14.20	<b>Bruce Kramer</b> , NSF, US: NSF Future Manufacturing Program
14.20 – 15.00	<b>Yuan-Shin Lee</b> , North Carolina State Univ., US: Industrial Internet of Things
15.00 -15.20	<b>Peter Ševčík</b> , UNIZA Žilina, Slovakia: Industrial Internet of Things and Their Platforms
15.20 – 15.45	<i>Coffee Break</i>
15.45 – 16.20	<b>Pavel Burget &amp; Petr Kadera</b> , CIIRC CTU, Czech Republic: AI-based Methods to Increase the Production Flexibility and Variability
16.20 – 17.20	<i>Visit to the Testbed for Industry 4.0 – for speakers and non-academic audience</i>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements No. 857306.



EUROPEAN UNION  
European Structural and Investment Funds  
Operational Programme Research,  
Development and Education



# US-EU Workshop on Intelligent Manufacturing

2-4 June 2022 | CIIRC CTU, Prague, Czech Republic



## Friday, 3 June 2022

9.00 – 9.40	<b>Martin Ruskowski</b> , DFKI, Germany: Production Level 4
9.40 – 10.20	<b>Růžena Bajcsy</b> , Univ. of Berkeley, US <b>Carolyn Matl</b> , Postdoc, Toyota Research, US <b>Isabella Huang</b> , Graduate student, UC Berkeley, US New Problems in Robotics that Could be of Interest to Industry 4.0
10.20 – 10.40	<i>Coffee Break</i>
10.40 – 11.20	<b>Federico Sciammarella</b> , MxD Chicago, US: Digital Manufacturing and Cybersecurity
11.20 – 12.00	<b>Nadia Figueroa</b> , UPENN, US: Multiarm Robot and Human Cooperation
12.00 – 12.30	<b>Michael Valášek</b> , FME CTU, Czech Republic: Physically Interconnected Robots Enable New Industrial Applications of Robots
12.30 – 13.30	<i>Lunch Break</i> <i>Side program: Guided tours in the Testbed for Industry 4.0</i> <i>Start: 12:30 End: 13:20, 25 min for each of the two floors</i>
13.30 – 14.10	<b>Josef Šivic</b> , CIIRC CTU, Czech Republic: Learning Manipulation Skills from Instructional Videos
14.10 – 14.50	<b>Placid Mathew Ferreira</b> , Univ. of Illinois, Urbana Champaign, US: OSCM: An Operating System for Cloud-based Manufacturing
14.50 - 15.30	<b>Pavel Václavěk</b> , CEITEC, TU Brno, Czech Republic: Fail-operational Actuators with Applications in Production Systems and Future Vehicles
15.30 – 15.40	<b>Michal Gregor</b> , UNIZA Žilina, Slovakia: Experience with the Deep Reinforcement Learning
15.40 – 16.00	<b>Michal Koháni</b> , UNIZA Žilina, Slovakia: Decision Making for Large Scale Systems
16.00	<i>Wrap-up and Conclusions</i> <i>Small refreshments on the Balcony   Group Photo Shooting</i>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements No. 857306.



EUROPEAN UNION  
European Structural and Investment Funds  
Operational Programme Research,  
Development and Education

