

# US-EU Workshop on Intelligent Manufacturing

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



NATIONAL CENTRE  
FOR INDUSTRY 4.0



## 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 Žilina</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 – 13.45	<b>Vladimír Mařík</b> , CIIRC CTU, Czech Republic: Beyond Industry 4.0 – Building an AI Ecosystem
13.45 – 14.25	<b>Uwe Wieland</b> , VW, Germany: Digital Industry Platforms - Best Practices and Pitfalls for Building a Digital Manufacturing Ecosystem
14.25 – 15.05	<b>Yuan-Shin Lee</b> , North Carolina State Univ., US: Industrial Internet of Things
15.05 -15.25	<b>Peter Ševčík</b> , UNIZA Žilina, Slovakia: Industrial Internet of Things and Their Platforms
15.25 – 15.50	<i>Coffee Break</i>
15.50 – 16.30	<b>Pavel Burget &amp; Petr Kadera</b> , CIIRC CTU, Czech Republic: AI-based Methods to Increase the Production Flexibility and Variability
16.30 – 17.00	<b>Bruce Kramer</b> , NSF, US: NSF Future Manufacturing Program



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



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CZECH INSTITUTE  
OF INFORMATICS  
ROBOTICS AND  
CYBERNETICS  
CTU IN PRAGUE



NATIONAL CENTRE  
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## Friday, 3 June 2022

9.00 – 9.40	<b>Martin Ruskowski</b> , DFKI, Germany: Production Level 4
9.40 – 10.20	<b>Federico Sciammarella</b> , MxD Chicago, US: Digital Manufacturing and Cybersecurity
10.20 – 10.40	<i>Coffee Break</i>
10.40 – 11.20	<b>Růžena Bajcsy</b> , Univ. of Berkeley, US: New Problems in Robotics that Could be of Interest to Industry 4.0
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
12.00 – 13.30	<i>Lunch Break</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 – 15:50	<i>Coffee Break</i>
15.50 – 16.30	<b>Ram Vasudevan</b> , Univ. of Michigan, US: Decision for Large Scale Systems
16.30 – 16.50	<b>Michal Koháni</b> , UNIZA Žilina, Slovakia: Decision Making for Large Scale Systems
16.50	<i>Wrap-up and Conclusions</i>

## Saturday, 4 June 2022

Visit to the CIIRC Labs, demonstrations, discussions with researchers



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