## Thursday, 2 June 2022

<table>
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<tr>
<th>Time</th>
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| 8.45 – 9.00 | Official Opening by the Members of the Organizing Committee:  
Růžena Bajcsy, University of Berkeley  
Vladimír Mařík, CIIRC CTU  
Wolfgang Wahlster, DFKI |
| 9.00 – 9.40 | Wolfgang Wahlster, DFKI, Germany:  
The Next Decade of Industry 4.0 |
| 9.40 – 10.20 | Spyros Reveliotis, Georgia Tech, US:  
Real-time Management of Complex Resources |
| 10.20 – 10.35 | Small Ceremonies:  
Medal of University of Žilina awarded to Prof. Růžena Bajcsy by the Rector of the Univ. Žilina  
Prof. Jozef Jandačka to memorize the Dr.h.c. degree of this University  
Memorial Medal of CIIRC CTU awarded to Prof. Růžena Bajcsy by the Director of CIIRC CTU  
Dr. Ondřej Velek  
Diploma of the Elected Foreign Member of the Engineering Academy of the Czech Republic - Prof. Wolfgang Wahlster overtakes this diploma from Prof. Petr Zuna, President of EA CR |
| 10.35 – 10.55 | Coffee Break |
| 10.55 – 11.35 | Julian Florez, Vicomtech, Spain:  
Industry 4.0 Challenge and Trend: Smart Integration of Human in the Loop and Automation |
| 11.35 – 12.20 | Jay Lee, University of Cincinnati, US:  
AI-Augmented Quality Metrology for Industrial Internet-based Production Systems |
| 12.20 – 13.15 | Lunch Break |
| 13.15 – 13.45 | Vladimír Mařík, CIIRC CTU, Czech Republic:  
Beyond Industry 4.0 – Building an AI Ecosystem |
| 13.45 – 14.25 | Uwe Wieland, VW, Germany:  
Digital Industry Platforms - Best Practices and Pitfalls for Building a Digital Manufacturing Ecosystem |
| 14.25 – 15.05 | Yuan-Shin Lee, North Caroline State Univ., US:  
Industrial Internet of Things |
| 15.05 – 15.25 | Peter Ševčík, UNIZA Žilina, Slovakia:  
Industrial Internet of Things and Their Platforms |
| 15.25 – 15.50 | Coffee Break |
| 15.50 – 16.30 | Pavel Burget & Petr Kadera, CIIRC CTU, Czech Republic:  
AI-based Methods to Increase the Production Flexibility and Variability |
| 16.30 – 17.00 | Bruce Kramer, NSF, US:  
NSF Future Manufacturing Program |
Friday, 3 June 2022

9.00 – 9.40  
**Martin Ruskowski**, DFKI, Germany:  
Production Level 4

9.40 – 10.20  
**Federico Sciammarella**, MxD Chicago, US:  
Digital Manufacturing and Cybersecurity

10.20 – 10.40  
Coffee Break

10.40 – 11.20  
**Růžena Bajcsy**, Univ. of Berkeley, US:  
New Problems in Robotics that Could be of Interest to Industry 4.0

11.20 – 12.00  
**Nadia Figueroa**, UPENN, US:  
Multiarm Robot and Human Cooperation

12.00 – 12.30  
**Michael Valášek**, FME CTU, Czech Republic:  
Physically Interconnected Robots Enable New Industrial Applications of Robots

12.00 – 13.30  
Lunch Break

13.30 – 14.10  
**Josef Šivic**, CIIRC CTU, Czech Republic:  
Learning Manipulation Skills from Instructional Videos

14.10 – 14.50  
**Placid Mathew Ferreira**, Univ. of Illinois, Urbana Champaign, US:  
OSCM: An Operating System for Cloud-based Manufacturing

14.50 - 15.30  
**Pavel Václavek**, CEITEC, TU Brno, Czech Republic:  
Fail-operational Actuators with Applications in Production Systems and Future Vehicles

15.30 – 15:50  
Coffee Break

15.50 – 16.30  
**Ram Vasudevan**, Univ. of Michigan, US:  
Decision for Large Scale Systems

16.30 – 16.50  
**Michal Koháni**, UNIZA Žilina, Slovakia:  
Decision Making for Large Scale Systems

16.50  
Wrap-up and Conclusions

Saturday, 4 June 2022

Visit to the CIIRC Labs, demonstrations, discussions with researchers