



“54th CIRP Conference on Manufacturing Systems, 2021”

Towards Digitalized Manufacturing 4.0

22-24 September 2021, Athens, Greece



CIRP CMS 2021 Program-at-a-glance

Day 1: 6 Parallel Sessions 08:30 – 17:30 CET*

Day 2: 6 Parallel Sessions 08:30 – 17:00 CET

Day 3: 5 Parallel Sessions 08:30 – 18:00 CET

*Time zone CET (Central European Time)

- Paper Presentation: 15 min
- Questions & Answers (Q/A): 5 min
- Manuscript number is the Elsevier ID: (e.g. PROCIR-D-XX-XXXXX)

Submission Statistics & Publication Information

- Accepted Papers: 331
- Submissions from: 35 Countries
- Proceedings will be published on Procedia CIRP (by Elsevier), which is indexed in the EI Compendex & Scopus Databases
- Special Issues with selection of enhanced papers in: IJCM, other journals to be announced



Abbreviation	Topic
ML	Machine Learning
ONT	Ontologies & Knowledge Management
CPS	Cyber-Physical Systems
DT_IoT	Digital Twins, Internet of Things (IoT) & Simulation
PSM	Planning, Scheduling & Maintenance
PSS	Product-Service Systems (PSS)
BAT	Battery Manufacturing
ROB	Robotic and Assembly Systems
MPD	Manufacturing Processes & Design
SEN	Sensing, Process Monitoring & Control
ADD	Additive Manufacturing
SYS	Manufacturing Systems
MAN	Management
AR/VR/MR	Augmented, Virtual & Mixed Reality
EDU	Education & Teaching
ENG	Energy
LCE	Life-Cycle Engineering
MX	Mixed-Session

Wednesday 22/09/2021 – DAY 1 Password for DAY 1: cms54day#1

08:30 – 09:00 CET	<p><i>Opening Ceremony</i></p> <p><i>George Chryssolouris (Lab. For Manufacturing Systems and Automation – LMS)</i></p> <p><i>Conference Overview: Dimitris Mourtzis (LMS)</i></p> <p align="right"><u>Zoom Link</u></p>						
09:00 – 10:00	<p>Keynote 1: Dimitris Mourtzis “Smart Manufacturing and Tactile Internet Powered by 5G: Investigation of Current Developments, Challenges, and Future Trends”</p> <p>Keynote 2: Panagiotis Stavropoulos “The Environmental Impact of Manufacturing and the LMS approach”</p>						
Parallel Sessions							
10:00-11:40		<p>S1.1 – SYS</p> <p><u>Zoom Link S1.1 SYS</u></p> <p>Session Chair: D. ROMERO</p>	<p>S2.1 – D & T IOT</p> <p><u>Zoom Link S2.1 DT&IOT</u></p> <p>Session Chair: G. PUTNIK</p>	<p>S3.1 – ML</p> <p><u>Zoom Link S3.1 ML</u></p> <p>Session Chair: D. CEGLAREK</p>	<p>S4.1 – MPD</p> <p><u>Zoom Link S4.1 MPD</u></p> <p>Session Chair: S. NEWMAN</p>	<p>S5.1 – ADD</p> <p><u>Zoom Link S5.1 ADD</u></p> <p>Session Chair: O. AVRAM</p>	<p>S6.1 – MAN</p> <p><u>Zoom Link S6.1 MAN</u></p> <p>Session Chair: K. ALEXOPOULOS</p>
	10:00 – 10:20	<u>PROCIR-D-20-00431</u>	<u>PROCIR-D-20-00388</u>	<u>PROCIR-D-20-00397</u>	<u>PROCIR-D-20-00395</u>	<u>PROCIR-D-20-00412</u>	<u>PROCIR-D-20-00386</u>
	10:20 – 10:40	<u>PROCIR-D-20-00503</u>	<u>PROCIR-D-20-00405</u>	<u>PROCIR-D-20-00411</u>	<u>PROCIR-D-20-00699</u>	<u>PROCIR-D-20-00454</u>	<u>PROCIR-D-20-00393</u>
	10:40 – 11:00	<u>PROCIR-D-20-00993</u>	<u>PROCIR-D-20-00440</u>	<u>PROCIR-D-20-00464</u>	<u>PROCIR-D-20-00722</u>	<u>PROCIR-D-20-00482</u>	<u>PROCIR-D-20-00423</u>
	11:00 – 11:20	<u>PROCIR-D-20-00590</u>	<u>PROCIR-D-20-00457</u>	<u>PROCIR-D-20-00470</u>	<u>PROCIR-D-20-00478</u>	<u>PROCIR-D-20-00493</u>	<u>PROCIR-D-20-00436</u>
	11:20 – 11:40	<u>PROCIR-D-20-00645</u>	<u>PROCIR-D-20-00460</u>	<u>PROCIR-D-20-00484</u>	<u>PROCIR-D-20-00569</u>	<u>PROCIR-D-20-00496</u>	<u>PROCIR-D-20-00443</u>
11:40 – 11:50	Coffee Break						
Parallel Sessions							
11:50 – 13:30		<p>S1.2 – SYS</p> <p><u>Zoom Link S1.2 SYS</u></p> <p>Session Chair: D. ROMERO</p>	<p>S2.2 – DT & IOT</p> <p><u>Zoom Link S2.2 DT&IOT</u></p> <p>Session Chair: G. PUTNIK</p>	<p>S3.2 – ML</p> <p><u>Zoom Link S3.2 ML</u></p> <p>Session Chair: D. CEGLAREK</p>	<p>S4.2 – MPD</p> <p><u>Zoom Link S4.2 MPD</u></p> <p>Session Chair: S. NEWMAN</p>	<p>S5.2 – ADD</p> <p><u>Zoom Link S5.2 ADD</u></p> <p>Session Chair: O. AVRAM</p>	<p>S6.2 – MAN</p> <p><u>Zoom Link S6.2 MAN</u></p> <p>Session Chair: K. ALEXOPOULOS</p>
	11:50 – 12:10	<u>PROCIR-D-20-00656</u>	<u>PROCIR-D-20-00469</u>	<u>PROCIR-D-20-00485</u>	<u>PROCIR-D-20-00555</u>	<u>PROCIR-D-20-00520</u>	<u>PROCIR-D-20-00445</u>
	12:10 – 12:30	<u>PROCIR-D-20-00687</u>	<u>PROCIR-D-20-00486</u>	<u>PROCIR-D-20-00492</u>	<u>PROCIR-D-20-00570</u>	<u>PROCIR-D-20-00536</u>	<u>PROCIR-D-20-00452</u>
	12:30 – 12:50	<u>PROCIR-D-20-00744</u>	<u>PROCIR-D-20-00525</u>	<u>PROCIR-D-20-00504</u>	<u>PROCIR-D-20-00601</u>	<u>PROCIR-D-20-00561</u>	<u>PROCIR-D-20-00501</u>
	12:50 – 13:10	<u>PROCIR-D-20-00764</u>	<u>PROCIR-D-20-00546</u>	<u>PROCIR-D-20-00545</u>	<u>PROCIR-D-20-01180</u>	<u>PROCIR-D-20-00579</u>	<u>PROCIR-D-20-00538</u>
	13:10 – 13:30	<u>PROCIR-D-20-00975</u>	<u>PROCIR-D-20-00567</u>	<u>PROCIR-D-20-00597</u>	<u>PROCIR-D-20-00952</u>	<u>PROCIR-D-20-00591</u>	<u>PROCIR-D-20-00662</u>
13:30 – 14:00	Lunch Break						
Parallel Sessions							
14:00-15:40		<p>S1.3 – SYS</p> <p><u>Zoom Link S1.3 SYS</u></p> <p>Session Chair: D. BRISSAUD</p>	<p>S2.3 – DT & IOT</p> <p><u>Zoom Link S2.3 DT&IOT</u></p> <p>Session Chair: A. PADOVANO</p>	<p>S3.3 – ML</p> <p><u>Zoom Link S3.3 ML</u></p> <p>Session Chair: L. MONOSTORI</p>	<p>S4.3 – MPD</p> <p><u>Zoom Link S4.3 MPD</u></p> <p>Session Chair: P. STAVROPOULOS</p>	<p>S5.3 – ADD</p> <p><u>Zoom Link S5.3 ADD</u></p> <p>Session Chair: E. CARPANZANO</p>	<p>S6.3 – MAN</p> <p><u>Zoom Link S6.3 MAN</u></p> <p>Session Chair: A. PAPACHARALAMPOPOULOS</p>
	14:00 – 14:20	<u>PROCIR-D-20-00539</u>	<u>PROCIR-D-20-00568</u>	<u>PROCIR-D-20-00599</u>	<u>PROCIR-D-20-00684</u>	<u>PROCIR-D-20-00610</u>	<u>PROCIR-D-20-00564</u>
	14:20 – 14:40	<u>PROCIR-D-20-01178</u>	<u>PROCIR-D-20-00574</u>	<u>PROCIR-D-20-00602</u>	<u>PROCIR-D-20-00737</u>	<u>PROCIR-D-20-00616</u>	<u>PROCIR-D-20-00670</u>
	14:40 – 15:00	<u>PROCIR-D-21-00012</u>	<u>PROCIR-D-20-00596</u>	<u>PROCIR-D-20-00603</u>	<u>PROCIR-D-20-00489</u>	<u>PROCIR-D-20-00702</u>	<u>PROCIR-D-20-00762</u>
	15:00 – 15:20	<u>PROCIR-D-21-00018</u>	<u>PROCIR-D-20-00598</u>	<u>PROCIR-D-20-00604</u>	<u>PROCIR-D-20-00407</u>	<u>PROCIR-D-20-00723</u>	<u>PROCIR-D-20-00983</u>
	15:20 – 15:40	<u>PROCIR-D-20-00516</u>	<u>PROCIR-D-20-00615</u>	<u>PROCIR-D-20-00622</u>	<u>PROCIR-D-20-01007</u>	<u>PROCIR-D-20-00416</u>	<u>PROCIR-D-21-00016</u>
15:40 – 15:50	Coffee Break						
Parallel Sessions							
15:50 – 17:30		<p>S1.4 – SYS</p> <p><u>Zoom Link S1.4 SYS</u></p> <p>Session Chair: D. BRISSAUD</p>	<p>S2.4 – DT & IOT</p> <p><u>Zoom Link S2.4 DT&IOT</u></p> <p>Session Chair: A. PADOVANO</p>	<p>S3.4 – ML</p> <p><u>Zoom Link S3.4 ML</u></p> <p>Session Chair: L. MONOSTORI</p>	<p>S4.4 – AR/VR/MR</p> <p><u>Zoom Link S4.4 AR/VR/MR</u></p> <p>Session Chair: P. STAVROPOULOS</p>	<p>S5.4 – ADD</p> <p><u>Zoom Link S5.4 ADD</u></p> <p>Session Chair: E. CARPANZANO</p>	<p>S6.4 – MAN</p> <p><u>Zoom Link S6.4 MAN</u></p> <p>Session Chair: A. PAPACHARALAMPOPOULOS</p>
	15:50 – 16:10	<u>PROCIR-D-20-00474</u>	<u>PROCIR-D-20-00627</u>	<u>PROCIR-D-20-00632</u>	<u>PROCIR-D-20-00552</u>	<u>PROCIR-D-20-00727</u>	<u>PROCIR-D-20-00668</u>
	16:10 – 16:30	<u>PROCIR-D-20-00694</u>	<u>PROCIR-D-20-00641</u>	<u>PROCIR-D-20-00648</u>	<u>PROCIR-D-20-00401</u>	<u>PROCIR-D-20-00954</u>	<u>PROCIR-D-20-00752</u>
	16:30 – 16:50	<u>PROCIR-D-20-00966</u>	<u>PROCIR-D-20-00665</u>	<u>PROCIR-D-20-00649</u>	<u>PROCIR-D-20-00414</u>	<u>PROCIR-D-20-00995</u>	<u>PROCIR-D-21-00225</u>
	16:50 – 17:10	<u>PROCIR-D-20-00417</u>	<u>PROCIR-D-20-00677</u>	<u>PROCIR-D-20-00664</u>	<u>PROCIR-D-20-00475</u>	<u>PROCIR-D-20-01165</u>	<u>PROCIR-D-20-00565</u>
	17:10 – 17:30	<u>PROCIR-D-20-00957</u>	<u>PROCIR-D-20-00685</u>	<u>PROCIR-D-20-00692</u>	<u>PROCIR-D-20-00487</u>	<u>PROCIR-D-20-00666</u>	

Thursday 23/09/2021 – DAY 2 Password for DAY 2: cms54day#2

08:30 – 09:30 CET	<p align="center"><i>Keynote 3: Alexandre Dolgui “Combinatorial optimization approaches for the preliminary design of machining systems”</i></p> <p align="center"><i>Keynote 4: Sotiris Makris “Industrial human robot collaboration for flexible manufacturing”</i></p> <p align="right">Zoom Link</p>						
Parallel Sessions							
09:30 – 11:10		<p align="center">S1.5 – SYS</p> <p align="center">Zoom Link S1.5 SYS</p> <p align="center">Session Chair: T. KAIHARA</p>	<p align="center">S2.5 – DT & IOT</p> <p align="center">Zoom Link S2.5 DT & IOT</p> <p align="center">Session Chair: A. NASSEHI</p>	<p align="center">S3.5 – ML</p> <p align="center">Zoom Link S3.5 ML</p> <p align="center">Session Chair: K. MARTINSEN</p>	<p align="center">S4.5 – AR/VR/MR</p> <p align="center">Zoom Link S4.5 AR/VR/MR</p> <p align="center">Session Chair: J. ANGELOPOULOS</p>	<p align="center">S5.5 – ROB</p> <p align="center">Zoom Link S5.5 ROB</p> <p align="center">Session Chair: S. MAKRIS</p>	<p align="center">S6.5 – ENG</p> <p align="center">Zoom Link S6.5 ENG</p> <p align="center">Session Chair: H. BIKAS</p>
	09:30 – 09:50	PROCIR-D-20-00488	PROCIR-D-20-00672	PROCIR-D-20-00697	PROCIR-D-20-00522	PROCIR-D-20-00389	PROCIR-D-20-00424
	09:50 – 10:10	PROCIR-D-20-00637	PROCIR-D-20-00707	PROCIR-D-20-00714	PROCIR-D-20-00400	PROCIR-D-20-00394	PROCIR-D-20-00439
	10:10 – 10:30	PROCIR-D-20-00450	PROCIR-D-20-01179	PROCIR-D-20-01014	PROCIR-D-20-00650	PROCIR-D-20-00435	PROCIR-D-20-00441
	10:30 – 10:50	PROCIR-D-20-00459	PROCIR-D-20-00757	PROCIR-D-20-00726	PROCIR-D-20-00660	PROCIR-D-20-00455	PROCIR-D-20-00453
	10:50 – 11:10	PROCIR-D-20-00461	PROCIR-D-20-00963	PROCIR-D-20-00729	PROCIR-D-20-00673	PROCIR-D-20-00607	PROCIR-D-20-00490
11:10 – 11:20	Coffee Break						
Parallel Sessions							
11:20 – 13:00		<p align="center">S1.6 – SYS</p> <p align="center">Zoom Link S1.6 SYS</p> <p align="center">Session Chair: D. D' ADDONA</p>	<p align="center">S2.6 – DT & IOT</p> <p align="center">Zoom Link S2.6 DT & IOT</p> <p align="center">Session Chair: A. NASSEHI</p>	<p align="center">S3.6 – ML</p> <p align="center">Zoom Link S3.6 ML</p> <p align="center">Session Chair: K. MARTINSEN</p>	<p align="center">S4.6 – AR/VR/MR</p> <p align="center">Zoom Link S4.6 AR/VR/MR</p> <p align="center">Session Chair: J. ANGELOPOULOS</p>	<p align="center">S5.6 – ROB</p> <p align="center">Zoom Link S5.6 ROB</p> <p align="center">Session Chair: S. MAKRIS</p>	<p align="center">S6.6 – ENG</p> <p align="center">Zoom Link S6.6 ENG</p> <p align="center">Session Chair: H. BIKAS</p>
	11:20 – 11:40	PROCIR-D-20-00446	PROCIR-D-20-00985	PROCIR-D-20-00738	PROCIR-D-20-00713	PROCIR-D-20-00494	PROCIR-D-20-00630
	11:40 – 12:00	PROCIR-D-20-00705	PROCIR-D-21-00009	PROCIR-D-20-00743	PROCIR-D-20-00715	PROCIR-D-20-00589	PROCIR-D-20-00647
	12:00 – 12:20	PROCIR-D-20-00418	PROCIR-D-21-00014	PROCIR-D-20-00754	PROCIR-D-20-00971	PROCIR-D-20-00595	PROCIR-D-20-00717
	12:20 – 12:40	PROCIR-D-20-00625	PROCIR-D-20-00495	PROCIR-D-20-00756	PROCIR-D-20-00499	PROCIR-D-20-00611	PROCIR-D-20-00748
	12:40 – 13:00	PROCIR-D-20-00594	PROCIR-D-20-00577	PROCIR-D-20-00991	PROCIR-D-20-00953	PROCIR-D-20-00653	PROCIR-D-20-00766
13:00 – 13:30	Lunch Break						
Parallel Sessions							
13:30 – 15:10		<p align="center">S1.7 – SYS</p> <p align="center">Zoom Link S1.7 SYS</p> <p align="center">Session Chair: R. TETI</p>	<p align="center">S2.7 – DT & IOT</p> <p align="center">Zoom Link S2.7 DT & IOT</p> <p align="center">Session Chair: A. PAPACHARALAMPOPOULOS</p>	<p align="center">S3.7 – ML</p> <p align="center">Zoom Link S3.7 ML</p> <p align="center">Session Chair: P. KARAGIANNIS</p>	<p align="center">S4.7 – BAT</p> <p align="center">Zoom Link S4.7 BAT</p> <p align="center">Session Chair: P. STAVROPOULOS</p>	<p align="center">S5.7 – ROB</p> <p align="center">Zoom Link S5.7 ROB</p> <p align="center">Session Chair: J. ANGELOPOULOS</p>	<p align="center">S6.7 – ONT</p> <p align="center">Zoom Link S6.7 ONT</p> <p align="center">Session Chair: A. BERNARD</p>
	13:30 – 13:50	PROCIR-D-20-00736	PROCIR-D-20-00658	PROCIR-D-20-00949	PROCIR-D-20-00398	PROCIR-D-20-00732	PROCIR-D-20-00698
	13:50 – 14:10	PROCIR-D-20-01183	PROCIR-D-20-00728	PROCIR-D-20-00996	PROCIR-D-20-01184	PROCIR-D-20-00746	PROCIR-D-20-01186
	14:10 – 14:30	PROCIR-D-20-01012	PROCIR-D-20-01170	PROCIR-D-20-01004	PROCIR-D-20-00562	PROCIR-D-20-00749	PROCIR-D-20-00432
	14:30 – 14:50	PROCIR-D-20-00984	PROCIR-D-20-00449	PROCIR-D-20-01017	PROCIR-D-20-00688	PROCIR-D-20-00981	PROCIR-D-20-00502
	14:50 – 15:10	PROCIR-D-20-00976	PROCIR-D-20-00458	PROCIR-D-21-00010	PROCIR-D-20-00638	PROCIR-D-20-00997	PROCIR-D-20-00964
15:10 – 15:20	Coffee Break						
Parallel Sessions							
15:20 – 17:00		<p align="center">S1.8 – SYS</p> <p align="center">Zoom Link S1.8 SYS</p> <p align="center">Session Chair: R. TETI</p>	<p align="center">S2.8 – DT & IOT</p> <p align="center">Zoom Link S2.8 DT & IOT</p> <p align="center">Session Chair: A. PAPACHARALAMPOPOULOS</p>	<p align="center">S3.8 – ML</p> <p align="center">Zoom Link S3.8 ML</p> <p align="center">Session Chair: P. KARAGIANNIS</p>	<p align="center">S4.8 – BAT</p> <p align="center">Zoom Link S4.8 BAT</p> <p align="center">Session Chair: P. STAVROPOULOS</p>	<p align="center">S5.8 – EDU</p> <p align="center">Zoom Link S5.8 EDU</p> <p align="center">Session Chair: N. PANOPOULOS</p>	<p align="center">S6.8 – ONT</p> <p align="center">Zoom Link S6.8 ONT</p> <p align="center">Session Chair: A. BERNARD</p>
	15:20 – 15:40	PROCIR-D-20-00671	PROCIR-D-20-00498	PROCIR-D-20-00447	PROCIR-D-20-00640	PROCIR-D-20-00533	PROCIR-D-20-00680
	15:40 – 16:00	PROCIR-D-20-00456	PROCIR-D-20-00661	PROCIR-D-20-00491	PROCIR-D-20-00663	PROCIR-D-20-00634	PROCIR-D-20-00711
	16:00 – 16:20	PROCIR-D-20-00406	PROCIR-D-20-00691	PROCIR-D-20-00532	PROCIR-D-20-00675	PROCIR-D-20-00959	PROCIR-D-20-00511
	16:20 – 16:40	PROCIR-D-20-00483	PROCIR-D-20-00708	PROCIR-D-20-00676	PROCIR-D-20-00404	PROCIR-D-20-00968	PROCIR-D-20-00391
	16:40 – 17:00	PROCIR-D-20-00580	PROCIR-D-20-00745	PROCIR-D-20-00693	PROCIR-D-20-00629	PROCIR-D-20-00992	PROCIR-D-20-00636

Friday 24/09/2021 – DAY Password for DAY 3: cms54day#3

08:30 – 09:30 CET	<p align="center"><i>Keynote 5: Alain Bernard “Integration of additive manufacturing in production systems”</i> <i>Keynote 6: Kosmas Alexopoulos “Artificial Intelligence for Manufacturing Systems”</i></p>						Zoom Link
Parallel Sessions							
09:30 – 11:10		<p align="center">S1.9 – PSM Zoom Link S1.9 PSM Session Chair: N. PAPA KOSTAS</p>	<p align="center">S2.9 – DT & IOT Zoom Link S2.9 DT & IOT Session Chair: P. STAVROPOULOS</p>	<p align="center">S3.9 – ML Zoom Link S3.9 ML Session Chair: G. MICHALOS</p>	<p align="center">S4.9 – LCE Zoom Link S4.9 LCE Session Chair: D. KIRITSIS</p>	<p align="center">S5.9 – ML Zoom Link S5.9 ML Session Chair: J. ANGELOPOULOS</p>	
	09:30 – 09:50	PROCIR-D-20-00628	PROCIR-D-20-00413	PROCIR-D-20-00642	PROCIR-D-20-00724	PROCIR-D-20-00683	
	09:50 – 10:10	PROCIR-D-20-00643	PROCIR-D-20-00479	PROCIR-D-20-00751	PROCIR-D-20-00960	PROCIR-D-20-00530	
	10:10 – 10:30	PROCIR-D-20-00471	PROCIR-D-20-00706	PROCIR-D-20-00763	PROCIR-D-20-00422	PROCIR-D-20-00587	
	10:30 – 10:50	PROCIR-D-20-00477	PROCIR-D-20-00408	PROCIR-D-20-00444	PROCIR-D-20-00526	PROCIR-D-20-00967	
	10:50 – 11:10	PROCIR-D-20-00473	PROCIR-D-20-00740	PROCIR-D-20-01016	PROCIR-D-20-00433		
11:10 – 11:20 Coffee Break							
Parallel Sessions							
11:20 – 13:00		<p align="center">S1.10 – PSM Zoom Link S1.10 PSM Session Chair: N. PAPA KOSTAS</p>	<p align="center">S2.10 – CPS Zoom Link S2.10 CPS Session Chair: P. STAVROPOULOS</p>	<p align="center">S3.10 – ML Zoom Link S3.10 ML Session Chair: G. MICHALOS</p>	<p align="center">S4.10 – PSS Zoom Link S4.10 PSS Session Chair: N. ANWER</p>	<p align="center">S5.10 – MX Zoom Link S5.10 MX Session Chair: J. ANGELOPOULOS</p>	
	11:20 – 11:40	PROCIR-D-20-00472	PROCIR-D-20-00462	PROCIR-D-20-01019	PROCIR-D-20-00451	PROCIR-D-20-00528	
	11:40 – 12:00	PROCIR-D-20-00644	PROCIR-D-20-00467	PROCIR-D-20-00700	PROCIR-D-20-00505	PROCIR-D-20-00600	
	12:00 – 12:20	PROCIR-D-20-00481	PROCIR-D-20-00557	PROCIR-D-20-00753	PROCIR-D-20-00507	PROCIR-D-20-00679	
	12:20 – 12:40	PROCIR-D-20-00521	PROCIR-D-20-00581	PROCIR-D-20-00758	PROCIR-D-20-00690	PROCIR-D-21-00007	
	12:40 – 13:00	PROCIR-D-20-00551	PROCIR-D-20-00614	PROCIR-D-20-01181	PROCIR-D-20-00541	PROCIR-D-20-01185	
13:00 – 13:30 Lunch Break							
Parallel Sessions							
13:30 – 15:10		<p align="center">S1.11 – PSM Zoom Link S1.11 PSM Session Chair: G. LANZA</p>	<p align="center">S2.11 – CPS Zoom Link S2.11 CPS Session Chair: A. PAPACHARALAMPOPOULOS</p>	<p align="center">S3.11 – ML Zoom Link S3.11 ML Session Chair: N. NIKOLAKIS</p>	<p align="center">S4.11 – SEN Zoom Link S4.11 SEN Session Chair: K. SALONITIS</p>	<p align="center">S5.11 – MX Zoom Link S5.11 MX Session Chair: N. PANOPOULOS</p>	
	13:30 – 13:50	PROCIR-D-20-00585	PROCIR-D-20-00617	PROCIR-D-20-00606	PROCIR-D-21-00015	PROCIR-D-20-01013	
	13:50 – 14:10	PROCIR-D-20-00593	PROCIR-D-20-00701	PROCIR-D-20-00608	PROCIR-D-20-00631	PROCIR-D-20-01182	
	14:10 – 14:30	PROCIR-D-20-00626	PROCIR-D-20-00747	PROCIR-D-20-00624	PROCIR-D-20-00678	PROCIR-D-20-00962	
	14:30 – 14:50	PROCIR-D-20-00514	PROCIR-D-20-00761	PROCIR-D-20-00403	PROCIR-D-20-00965	PROCIR-D-20-00621	
	14:50 – 15:10	PROCIR-D-20-00402	PROCIR-D-20-01169	PROCIR-D-20-00681	PROCIR-D-20-00419		
15:10 – 15:20 Coffee Break							
Parallel Sessions							
15:20 – 17:00		<p align="center">S1.12 – PSM Zoom Link S1.12 PSM Session Chair: G. LANZA</p>	<p align="center">S2.12 – CPS Zoom Link S2.12 CPS Session Chair: A. PAPACHARALAMPOPOULOS</p>	<p align="center">S3.12 – ML Zoom Link S3.12 ML Session Chair: N. NIKOLAKIS</p>	<p align="center">S4.12 – SEN Zoom Link S4.12 SEN Session Chair: K. SALONITIS</p>		
	15:20 – 15:40	PROCIR-D-20-00399	PROCIR-D-20-01177	PROCIR-D-20-00497	PROCIR-D-20-00506		
	15:40 – 16:00	PROCIR-D-20-00667	PROCIR-D-21-00017	PROCIR-D-20-00550	PROCIR-D-20-00554		
	16:00 – 16:20	PROCIR-D-20-00970	PROCIR-D-20-00442	PROCIR-D-21-00011	PROCIR-D-20-00540		
	16:20 – 16:40	PROCIR-D-21-00019	PROCIR-D-20-00548	PROCIR-D-20-00721	PROCIR-D-20-00392		
	16:40 – 17:00	PROCIR-D-20-00704	PROCIR-D-20-01011				

17:00 – 18:00

Best Paper Award
Round up
CIRP CMS 2022 Announcement

[Zoom Link](#)