







H2020-WIDESPREAD-2018, Project No. 857124

**June 2022** 

### Main events

2<sup>nd</sup> Workshop on "Structural Integrity of Additively Manufactured Materials" Hotel Continental Brno, Czech Republic & On-line, 4<sup>th</sup> - 5<sup>th</sup> February 2022

### ⇒ 3 keynote lectures:

Fatigue of additively manufactured lattice materials: a design and manufacturing challenge, Dr. Matteo Benedetti (Trento University, Italy)

Trends in Additive Manufacturing for Medical Devices: Applications and Challenges Dr. Lorenza Petrini (Politecnico di Milano, Italy)

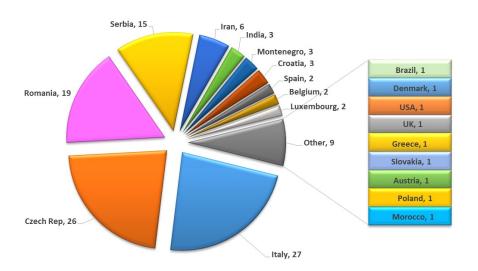
Additive Manufacturing in Aerospace Propulsion Prof. Toni Ivanov (University of Belgrade, Serbia)

### ⇒ 5 sessions with 40 presentations:

- 1. Characterization of AM polymer-based materials
- 2. Fatigue and fracture of AM materials Simulation of AM processes
- 3. Characterization of AM metallic materials
- 4. Properties and models of AM materials and metamaterials
- 5. AM technologies: advancements & new experiences

Hotel Continental Brno, 4 February 2022

#### 117 participants from 20 countries:



Selected papers will be submitted to a Special Issue of Journal of Mechanical Science and Technology (Springer)
(Springer journal, IF=1.713)











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**2<sup>nd</sup> Winter School,** *"Trends on Additive Manufacturing for Engineering Applications"*IPM Brno, Czech Republic & On-line, 6<sup>th</sup> - 10<sup>th</sup> February 2022

### ⇒ Program:

	Feb. 6		Feb. 7	Feb. 8	Feb. 9	Feb. 10
	Sunday		Monday	Tuesday	Wednesday	Thursday
		9.00 – 10.00	1st lecture (IPM & online) Prof. Liviu Marsavina Presentation of the SIRAMM project	5th lecture (online) Prof. Donato Firrao Prof. Filippo Berto Prof. Francesco lacoviello "Additive manufacturing in metals and defects: a challenging topic"	10th lecture (online) Prof. Javad Razavi "Fatigue life extension by crack repair"	12th lecture (IPM & online) Prof. Roxana Ghita "Gender (im) balance in science and engineering – a cross-cultural perspective"
		10.00- 11.00	2 <sup>nd</sup> lecture (online) Prof. Snezana Kirin "Statistical methods for evaluating the experimental data obtained by testing AMM"	6th lecture (online) Dr. Marco Maurizi  "Data-driven approaches for modeling and design of additive manufactured architected materials"	11th lecture (IPM & online) Dr. Jan Cizek "Cold spray Additive Manufacturing"	13th lecture (IPM & online) Prof. Marian Janek "Additive manufacturing of bioactive personalised hard tissue replacements" Prof. Lubos Baca, "Opportunities and challenges in the fused deposition modeling of ceramics"
		11.00 – 11.30	Break (IPM)	Break (IPM)	Break (IPM)	Break (IPM)
		11.30 – 12.30	3rd lecture (IPM & online) Dr. Jaroslav Kovacik "Cross-properties in Cu- graphite composites and aluminium foams and their applicability to Additive Manufacturing of materials"	7th lecture (online) Prof. Florian Arbeiter "Mechanical properties of layered polymers produced via extrusion-based additive manufacturing"	Practical session 1 (IPM & online) Advanced testing	Final exam (IPM & online)
		12.30 – 14.30	Lunch	Lunch	Lunch	Lunch
14.30 – 16.30 16.30 – 17.00	registration (IPM)  Opening of the winter	14.30 – 16.00	4th lecture (online) Dr. Francesco Puzello "Additive Manufacturing from prototype to mass customization: a new industrial revolution. Challenges in AM production"	8th lecture (online) Dr. S. Tavernini (*) "The Marie Skiodowska- Curie Actions in Horizon Europe, with a special focus on postdoctoral fellowship"	Practical session 2 (IPM & online) Brno Univ. of Tech. 3D printers for metals	14.30 – 15.30  Discussion session (IPM & online) Research, future perspectives and international collaborations on AM in engineering
		16.00 – 17.00	Presentation of some participants' backgrounds and current activities (IPM & online)	9th lecture (online) Prof. Chao Gao "Structural Integrity of Additive Manufactured Components – Introduction to AM of polymer component"	(*)16.00 – 17.00 (IPM & online) Dr. S. Tavernini will be available to discuss and answer questions by the winter school attendee on research funding and related tips	15.30 – 16.00 Closing of the winter School (IPM & online)



















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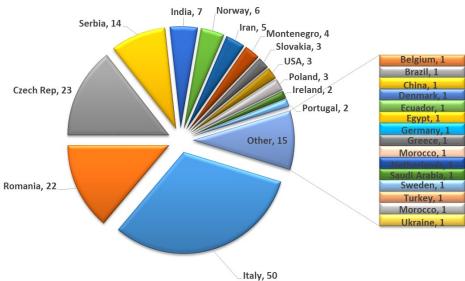
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2<sup>nd</sup> Winter School, "Trends on Additive Manufacturing for Engineering Applications" IPM Brno, Czech Republic & On-line, 6<sup>th</sup> - 10<sup>th</sup> February 2022

- ⇒ 13 lectures
- ⇒ 2 practical sessions
- @ IPM Brno & Brno University of Technology
- ⇒ 2 discussions and participant participations
- ⇒ Participants: 159 participants from 28 countries























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### Main events

**Organization of Mini Symposia at conferences** 

9th "Advanced Materials and Structures", Timisoara - Romania, 16th - 18th June 2022

Presentation of SIRAMM project by the coordinator Prof. Liviu Marsavina and other 8 research papers.



"European

Fracture", Funchal - Portugal, 27<sup>th</sup>June - 1<sup>st</sup> July 2022

Conference on

Organized together with TC13: Education and Training committee of European Structural Integrity Society. Prof. Liviu Marsavina the coordinator of the SIRAMM project presented the paper: Early Stage Researchers training in of SIRAMM project

the framework





















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## **Forthcoming Events**



⇒ Final international conference on:

"Structural Integrity and Reliability of Advanced Materials obtained through Additive Manufacturing" - SIRAMM23 Central Library, Polytechnic Univ. of Timisoara (UPT), Romania

Dates: 8<sup>th</sup> - 11<sup>th</sup> March 2023



⇒ 3<sup>rd</sup> Winter School:

"Trends on Additive Manufacturing for Engineering Applications" Faculty of Mechanical Engineering, Univ. of Belgrade, Serbia Dates: 5<sup>th</sup> - 10<sup>th</sup> February 2023



⇒ International Workshop on Reliability and Design of Additively Manufactured Materials -RdAMM22

"Reliability and Design of Additively Manufactured Materials" - RdAMM22 Faculty of Mechanical Engineering, Univ. of Belgrade, Serbia & Online

Dates: 4<sup>th</sup> - 6<sup>th</sup> October 2022

#### **Contact Us**

Contact us for more information about our

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Participation in all Events is free! However, a limited number of places is available and registration is required.

#### More information about future events on:

http://www.siramm.unipr.it/Events.htm https://www.facebook.com/SIRAMM2020 https://twitter.com/SIRAMM1