

**Tuesday, 10th September 2019**

**Time    Duration**

**AULA FORLANINI**

16:00    3:00:00

**Pre-Registration**

19:00    1:00:00

**Welcome Cocktail**

20:00

# Wednesday, 11th September 2019

Time	Duration	AULA FORLANINI					
8:00		Registration					
		AULA MAGNA					
8:30	0:40:00	Welcome Note					
9:10	0:40:00	Plenary Lecture 1 – <i>Development in (metal) 3D printing for next generation smart products</i> , Johannes H. Schleifenbaum (RWTH Aachen University)					
9:50	0:40:00	Plenary Lecture 2 – <i>Failure Prediction in Additive Manufacturing Processes</i> , Ade Makinde (General Electric Global Research)					
10:30	0:30:00	Coffee Break					
		AULA MAGNA	AULA FOSCOLO	AULA SCARPA	AULA VOLTA	AULA 400	AULA IV GIURISPRUDENZA
11:00	0:30:00	Keynote	Keynote	Keynote	Keynote	Keynote	
11:30	0:20:00	IS+GS - Topology and Shape Optimization for AM-ready Design (I)	<i>GS – AM Material Modeling (I)</i>	IS - Efficient approaches for simulating AM (I)	IS - Modeling and Simulation of powder bed AM Processes (I)	<i>GS - AM Product Simulation and innovative Applications (I)</i>	
11:50	0:20:00						
12:10	0:20:00						
12:30	0:20:00						
12:50	0:20:00						
13:10	1:10:00	Lunch/Industrial Workshops					
14:20	0:30:00	Keynote	Keynote	Keynote	Keynote	Keynote	
14:50	0:20:00	IS+GS - Topology and Shape Optimization for AM-ready Design (II)	<i>GS – AM Material Modeling (II)</i>	IS - Efficient approaches for simulating AM (II)	IS - Modeling and Simulation of powder bed AM Processes (II)	<i>GS - AM Product Simulation and innovative Applications (II)</i>	
15:10	0:20:00						
15:30	0:20:00						
15:50	0:20:00						
16:10	0:20:00						
16:30	0:30:00	Coffee Break					
17:00	0:20:00	IS+GS - Topology and Shape Optimization for AM-ready Design (III)	<i>GS – AM Material Modeling (III)</i>	<i>GS - AM Process Simulation (I)</i>	IS - Modeling and Simulation of powder bed AM Processes (III)	<i>GS - AM Product Simulation and innovative Applications (III)</i>	
17:20	0:20:00						
17:40	0:20:00						
18:00	0:20:00						
18:20	0:20:00						
18:40	0:20:00						
19:00							
19:15	1:00:00	Guided City Tour					
20:15							

# Thursday, 12th September 2019

**Time**      **Duration**

## AULA MAGNA

Welcome Note

Plenary Lecture 1 – *Multi-scale Process Structure Simulations for Additive Manufacturing in Metals*, Gregory Wagner (Northwestern University)

Plenary Lecture 2 – *Towards Calibrated, Traceable Measurements of the Melt Pool on the NIST AM Metrology Testbed*, Brandon Lane (NIST)

10:30      0:30:00

Coffee Break

AULA MAGNA

AULA FOSCOLO

AULA SCARPA

AULA VOLTA

AULA 400

AULA IV GIURISPRUDENZA

11:00      0:30:00

Keynote

Keynote

Keynote

Keynote

Keynote

Keynote

11:30      0:20:00

IS+GS - Topology  
and Shape  
Optimization for  
AM-ready Design  
(IV)

IS - Modelling and  
Simulation of Advanced  
Manufacturing of  
Functional Materials

IS - AM: Applications  
of Measurements in  
Simulations

IS - Advanced  
Simulation  
Technologies in  
AM

IS - Volumetric Spline  
Representations and  
Isogeometric Analysis  
for AM

IS - Mathematical Modelling  
and Analysis for advanced  
structural Design, Simulation  
and Optimization

11:50      0:20:00

12:10      0:20:00

12:30      0:20:00

12:50      0:20:00

GS - AM Process  
Simulation (III)

13:10      1:10:00

Lunch/Industrial Workshops

14:20      0:30:00

Keynote

Keynote

Keynote

Keynote

Keynote

Keynote

14:50      0:20:00

IS+GS - Topology  
and Shape  
Optimization for  
AM-ready Design  
(V)

GS – AM Material  
Modeling (IV)

GS - AM Process  
Simulation (IV)

IS - AM for  
Biomedical  
Applications

GS - AM Product  
Simulation and  
innovative  
Applications (IV)

IS - Mathematical  
Methods for  
optimal Design  
and Structures (I)

15:10      0:20:00

15:30      0:20:00

15:50      0:20:00

16:10      0:20:00

16:30      0:30:00

Coffee Break

17:00      0:20:00

IS+GS - Topology  
and Shape  
Optimization for  
AM-ready Design  
(VI)

GS – AM Material  
Modeling (V)

GS - AM Process  
Simulation (V)

GS - AM Multi-  
physics and Multi-  
scale Problems (I)

GS - AM Product  
Simulation and  
innovative  
Applications (V)

IS - Mathematical  
Methods for  
optimal Design  
and Structures (II)

17:20      0:20:00

17:40      0:20:00

18:00      0:20:00

18:20      0:20:00

18:40      0:20:00

19:00

19:30      2:00:00

Guided Tour of Borromeo College & Aperitif

20:30      2:00:00

Social Dinner

22:30

# Friday, 13th September 2019

**Time**      **Duration**

## AULA MAGNA

9:00      0:10:00

Welcome Note

9:10      0:40:00

*Plenary Lecture 1 – Adding Process Physics to Topology Optimization for Additive Manufacturing, Matthijs Langelaar (Delft University of Technology)*

9:50      0:40:00

*Plenary Lecture 2 – Mechanics and tailoring of additively built metallic lattices and applications on orthopaedics, Damiano Pasini (McGill University)*

10:30      0:30:00

Coffee Break

AULA MAGNA

AULA FOSCOLO

AULA SCARPA

AULA VOLTA

AULA 400

AULA IV GIURISPRUDENZA

11:00      0:30:00

Keynote

Keynote

Keynote

Keynote

Keynote

11:30      0:20:00

**IS+GS - Topology  
and Shape  
Optimization for  
AM-ready Design  
(VII)**

**IS - Microstructure  
Evolution of Alloys  
during AM (I)**

**IS - Simulation and  
Fatigue in Metal  
AM (I)**

**IS - Simulation in  
the Design of AM  
Devices**

**IS - New Trends in  
4D Printing (I)**

11:50      0:20:00

12:10      0:20:00

12:30      0:20:00

12:50      0:20:00

13:10      1:10:00

Lunch/Industrial Workshops

14:20      0:30:00

Keynote

Keynote

Keynote

Keynote

Keynote

14:50      0:20:00

**IS+GS - Topology  
and Shape  
Optimization for  
AM-ready Design  
(VIII)**

**IS - Microstructure  
Evolution of Alloys during  
AM (II)**

**IS - Constitutive  
Modelling and  
advanced Simulation  
Techniques for the  
Simulation AM  
Processes**

**GS - AM Multi-  
physics and Multi-  
scale Problems (II)**

**IS - New Trends in  
4D Printing (II)**

15:10      0:20:00

15:30      0:20:00

15:50      0:20:00

16:10      0:20:00

**IS - Simulation and  
Fatigue in Metal AM (II)**

16:30      0:30:00

Coffee Break

17:00      0:20:00

**IS+GS - Topology  
and Shape  
Optimization for  
AM-ready Design  
(IX)**

**GS – AM Material  
Modeling (VII)**

**GS - AM Process  
Simulation (VI)**

**GS - AM Multi-  
physics and Multi-  
scale Problems (III)**

17:20      0:20:00

17:40      0:20:00

18:00      0:20:00

18:20      0:20:00

18:40

18:45      0:15:00

Closing Ceremony

19:00