XVII Convegno dell'Associazione Italiana delle Tecnologie Manifatturiere
Bari, 9-12 settembre 2025

XVII CONVEGNO AITEM

ASSOCIAZIONE ITALIANA
DELLE TECNOLOGIE MANIFATTURIERE

Bari 9-12 settembre 2025

PROGRAMMA

Politecnico di Bari

Dipartimento Meccanica Matematica Management

MIUR Dipartimento di Eccellenza 2018-2022 2023-2027

PROGRAMMA SINTETICO

Martedì 9 settembre	
15:00-18:00	Riunione del Consiglio Direttivo
15:00-18:00	Riunione della Giunta PAA
19:00-21:00	Cocktail di benvenuto

Mercoledì 10 settembre	
08:00-9:00	Registrazione
09:00-10:30	Apertura XVII Convegno AITEM
10:30-13:30	Sessione Giovani Ricercatori – Premio “Edoardo Capello”
13:30-15:00	Pranzo
15:00-17:00	Sessione Giovani Ricercatori – Premio “Edoardo Capello”
17:00-19:00	Riunione della Sezione PAA
20:00-23:00	Cena Sociale

Giovedì 11 settembre	
08:30-10:30	Sessioni parallele
10:30-11:00	Coffee break
11:00-13:00	Sessioni parallele
13:00-14:30	Pranzo
14:30-16:50	Sessioni parallele
16:50-19:30	Assemblea AITEM

Venerdì 12 settembre	
08:30-10:30	Sessioni parallele
10:30-11:00	Coffee break
11:00-12:30	Sessioni parallele
13:00-14:30	Pranzo
14:30-16:00	Sessione “White paper”
16:00-16:30	Chiusura XVII Convegno AITEM

PROGRAMMA
MARTEDÌ 09 SETTEMBRE

Sala Riunioni 2° piano DMMM - Campus Quagliariello Martedì 09 settembre, 15:00 – 18:00	
15:00-18:00	Riunione del Consiglio Direttivo

Sala Riunioni 1° piano DMMM - Campus Quagliariello Martedì 09 settembre, 15:00 – 18:00	
15:00-18:00	Riunione della Giunta PAA

Museo Archeologico di Santa Scolastica, Via Venezia 73, Bari Martedì 09 settembre, 19:00 – 21:00	
19:00-21:00	Cocktail di benvenuto

PROGRAMMA
MERCOLEDÌ 10 SETTEMBRE

PROGRAMMA DETTAGLIATO DELLE SESSIONI

Aula Magna "Attilio Alto" – Campus Quagliariello Mercoledì 10 settembre, 08:00 – 10:30 Apertura XVII Convegno AITEM *Presiede: L.M. Galantucci – Politecnico di Bari*	
08:00-09:00	Registrazione
09:00-09:30	Saluti di Apertura • Prof. Ing. Luigi M. Galantucci • Prof. Ing. Francesco Cupertino, Rettore del Politecnico di Bari • Prof.ssa Ing. Ilaria Filomena Giannoccaro, Direttrice del Dipartimento di Meccanica, Matematica e Management, Politecnico di Bari • Dott. Vito Leccese, Sindaco di Bari • Dott.ssa Gianna Elisa Berlingerio, Dir. Dipartimento Sviluppo Economico Regione Puglia • Prof. Ing. Luca Settineri, Presidente AITEM
09:30-09:50	Keynote 1: IA e dintorni: come gli algoritmi possono cambiare prospettiva alle tecnologie- Prof. Roberto Bellotti (Dip. Interuniversitario di Fisica, Università di Bari "Aldo Moro")
09:50-10:10	Keynote 2: Prospettive e sfide future dell'aereospazio: il caso Puglia - Dott. Giuseppe Acierno (Presidente e Direttore Generale del Distretto Tecnologico Aerospaziale S.C. a r.l.)
10:10-10:30	Keynote 3: Tecnologia Laser avanzata, automazione ed intelligenza artificiale per lo sviluppo delle tecnologie Additive per metallo - Ing. Paolo Calefati (Amm. Deleg. Prima Additive S.r.l.)

Aula Magna "Attilio Alto" – Campus Quagliariello Mercoledì 10 settembre, 10:30 – 13:30 Sessione Giovani Ricercatori – Premio "Edoardo Capello" *Presiede: Livan Fratini*	
10:30-11:00	A Multi-Modal and sensorized 3D-Printed Omnidirectinal Snake Tongue Bioinspired Soft Actuator *Antonio Pavone and Gianluca Percoco*
11:00-11:30	Dot-by-Dot Wire Arc Additive Manufacturing Finite Element Simulation for Thermal Cycle Prediction *Arturo Cioni, Gustavo Carvalho and Niccolò Grossi*
11:30-12:00	Novel approaches for layer-level functionally graded materials via PBF-LB/M *Vito Errico, Paolo Posa and Sabina Luisa Campanelli*

12:00-12:30	Towards Digital Twin in Additive Manufacturing: a multi-fidelity approach for enhancing LPBF Process Modeling with In-Situ Data *Matteo Bugatti, Giulio Valenti and Bianca Maria Colosimo*
12:30-13:00	A comparative analysis of AA6061 and AlSi10Mg processed via Friction Stir Extrusion *Sara Bocchi, Gianluca D'Urso and Claudio Giardini*
13:00-13:30	An innovative mechanistic-thermal model for studying the effect of MQL in peck drilling *Luca Bernini, Paolo Albertelli and Michele Monno*

Campus Quagliariello Mercoledì 10 settembre, 13:30 – 15:00	
13:30-15:00	Pranzo

Aula Magna "Attilio Alto" – Campus Quagliariello Mercoledì 10 settembre, 15:00 – 17:00 Sessione Giovani Ricercatori – Premio "Edoardo Capello" *Presiede: Pierpaolo Carlone*	
15:00-15:30	Micro-geometrical evolution of titanium surfaces by dry electropolishing *Niccolò Burattini, Luana Bottini and Alberto Boschetto*
15:30-16:00	Femtosecond laser cutting of current collectors: a study for high quality Li-Ion battery fabrication in electric vehicles *Caterina Angeloni, Dongkyoung Lee and Alessandro Fortunato*
16:00-16:30	Combining FEM Simulations and Machine Learning for Skin Contamination Prediction in Aluminum Alloy Extrusion Processes *Riccardo Pelaccia, Marco Negozio and Adrian H.A Lutey*
16:30-17:00	A two-step simulation approach to predict surface micro-textures replication in injection-molded polymeric parts with experimental validation *Keltoum Oubellaouch, Marco Sorgato and Barbara Reggiani*

Aula Magna “Attilio Alto”- Campus Quagliariello Mercoledì 10 settembre, 17:00 – 18:30	
17:00-19:00	Riunione della Sezione PAA

Sala Zonno, Molo San Nicola 3, Bari Mercoledì 10 settembre, 20:00 – 23:00	
20:00-23:00	Cena sociale

PROGRAMMA
GIOVEDÌ 11 SETTEMBRE

Aula A- Campus Quagliariello Giovedì 11 settembre, 08:30 – 13:00 Sessione “Additive manufacturing and reverse engineering” *Presiedono: I parte - Claudio Giardini and Alberto Boschetto; II parte - Antonino Squillace*	
08:30-08:50	The Effect of Additive Manufacturing-Induced Anisotropy on Tool Wear When machining Martensitic Nitinol *Flavia Tucci, Rachele Bertolini, Andrea Ghiotti and Stefania Bruschi*
08:50-09:10	Effect of Process Parameters on AlCoCr2FeMo0.5Ni High-Entropy Alloy Coatings Produced Using Laser Directed Energy Deposition *Chiara Gianassi, Erica Liverani, Alessandro Ascari and Alessandro Fortunato*
09:10-09:30	Instrumented indentation tests for local temperature-dependent mechanical properties assessment of laser-based powder bed fusion of aluminium alloy *Stefano Guarino, Gennaro Salvatore Ponticelli, Alfio Scuderi, Simone Venettacci and Vittorio Villani*
09:30-09:50	Optimizing 3D printing process parameters for high-performance inflatable soft actuators *Rosanna Rifino, Alessio Pricci and Gianluca Percoco*
09:50-10:10	Understanding powder transport mechanisms in directed energy deposition via design of experiments *Adriano Nicola Pilagatti, Eleonora Atzeni, Alessandro Salmi and Luca Iuliano*
10:10-10:30	Physics-based model for dot geometry prediction in dot-by-dot Wire Arc Additive Manufacturing *Niccolò Grossi, Guido Pierattini, Riccardo Lilli and Antonio Scippa*
10:30-11:00	Coffee break
11:00-11:20	Design and preliminary testing of innovative tooling system elements obtained by L-PBF process for effective suppression of chatter vibrations *Federico Scalzo, Giovanni Totis, Emanuele Vaglio, Armando Ítalo Sette Antonialli and Marco Sortino*
11:20-11:40	A preliminary study about high-pressure homogenization as a viable alternative to produce powder feedstock for selective laser sintering of biopolymers *Alberto Giubilini, Giovanna Colucci, Manuela Galati, Giovanni Marchiandi, Massimo Messori, Luca Iuliano and Paolo Minetola*
11:40-12:00	In-situ monitoring of laser powder bed fusion on multi-material substrates for electric mobility *Marco Grasso, Matteo Bugatti, Bianca Colosimo, Frank Sarfert and Aitor Echaniz*
12:00-12:20	FFF of PLA reinforced with flax: effects of the infill strategy on low-velocity impact behavior and the energy consumption *Ersilia Cozzolino, Antonello Astarita, Ilaria Papa and Valentina Lopresto*

12:20-12:40	Silicone 3D Printing: Experimental Validation of a Reduced-Order Numerical Model for Optimal Layer Deposition *Alessio Pricci and Gianluca Percoco*
12:40-13:00	Optimization of process parameters for Fused Filament Fabrication of ULTEM 1010 *Emanuele Vaglio, Erica Billè, Alfredo Rondinella, Federico Scalzo, Alessandro Gambitta, Giovanni Totis and Marco Sortino*

Aula B - Campus Quagliariello Giovedì 11 settembre, 08:30 – 13:00 Sessione "Manufacturing processes design, optimization and engineering" *Presiedono: I parte - Aldo Attanasio and Mohamad El Mehtedi; II parte - Luca Romoli and Luca Sorrentino*	
08:30-08:50	Enhancing the robustness of nanostructures through the production of self-protective structures by injection molding of thermoplastic elastomers. *Giacomo Baruffa, Giulia Zaniboni, Keltoum Oubellaouch, Giovanni Lucchetta and Marco Sorgato*
08:50-09:10	Physical foaming of 25% post-industrial recycled TPU using the supercritical foaming technology *Francesco Maciariello, Giovanni Lucchetta and Marco Sorgato*
09:10-09:30	Modeling High-Speed Laser Cutting of Copper Current Collectors for Process Optimization *Samuele Piandoro, Caterina Angeloni, Alessandro Fortunato, Erica Liverani and Alessandro Ascari*
09:30-09:50	Friction Stir Welding of AA6082 and AA5083 T-Joints for Naval Applications: Finite Element Modeling and Experimental Analysis of Material Flow *Guido Di Bella, Mohamed Chairi, Davide Campanella, Riccardo Puleo and Gianluca Buffa*
09:50-10:10	Switching supervisory control in fusion laser cutting with vision-based process state detection *Leonardo Caprio, Sofia Guerra, Matteo Pacher, Davide Gandolfi, Sergio Matteo Savaresi, Mara Tanelli and Barbara Previtali*
10:10-10:30	Peripheral Coarse Grain Prediction in Extruded AA6082: Combining Finite Element Simulations with Neural Networks *Marco Negozio, Adrian Lutey, Antonio Segatori, Riccardo Pelaccia, Sara Di Donato, Barbara Reggiani and Lorenzo Donati*
10:30-11:00	Coffee break
11:00-11:20	Investigating the tube production via Friction Stir Extrusion of aluminum chips *Riccardo Puleo, Muhammad Adnan, Giuseppe Ingarao, Gianluca Buffa and Livan Fratini*

11:20-11:40	Identification of tool tip frequency response function through surface location error *Lorenzo Morelli, Niccolò Grossi and Antonio Scippa*
11:40-12:00	An AI-based approach for flow front monitoring and prediction in liquid composite molding processes based on dielectric and visual data elaboration *Vitantonio Esperto, Fausto Tucci, Felice Rubino and Pierpaolo Carlone*
12:00-12:20	Modeling of molten pool geometry and remelting layer in the laser ablation of Ti6Al4V alloy *Serafino Caruso, Maria Rosaria Saffioti, Giovanna Rotella and Domenico Umbrello*
12:20-12:40	Surface Integrity study in Cryogenic Milling of Ti-6Al-4V titanium alloy *Paolo Albertelli and Michele Monno*
12:40-13:00	Resin molds to improve thermal energy consumption in injection molding process *Giulia Zaniboni, Riccardo Pelaccia, Rossella Surace, Leonardo Orazi, Giovanna Rotella and Vito Basile*

Aula C - Campus Quagliariello Giovedì 11 settembre, 08:30 – 13:00 Sessione “Assembly, disassembly and Circular Economy” *Presiedono: I parte – Stefano Guarino; II parte - Marcello Colledani and Gianluca Buffa*	
08:30-08:50	A Value-Driven Approach to Printed Circuit Board Inspection: Strategic Use of Inspection Technologies to Reduce Waste *Stefano Puttero, Elisa Verna, Gianfranco Genta and Maurizio Galetto*
08:50-09:10	Exploring multi-human multi-robot collaboration in assembly processes: challenges and opportunities in quality and manufacturing *Matteo Capponi, Aurora Sofia Di Matteo and Luca Mastrogiacomo*
09:10-09:30	Reuse of 316L stainless steel towards zero-waste Laser Powder Bed Fusion *Gabriele Locatelli, Sara Bocchi, Mariangela Quarto and Gianluca D'Urso*
09:30-09:50	Welding and Wire Arc Additive Manufacturing using FSE solid-state recycled wires: challenges and future perspectives *Gustavo Senna Carvalho, Gianni Campatelli and Gianluca Buffa*
09:50-10:10	Optimization of Manufacturing Processes for PS-Paper Powder Compounds in Sustainable Foodservice Plates *Arif Enes Karaca, Alessandra Caggiano and Massimiliano Barletta*
10:10-10:30	Wire-feed Friction Stir Extrusion-based Additive Manufacturing of Aluminum Alloys *Kirill Kalashnikov, Davide Campanella, Adnan Muhammad, Rosa Di Lorenzo, Giuseppe Ingarao, Gianluca Buffa and Livan Fratini*

10:30-11:00	Coffee break
11:00-11:20	Implementing Job Sequencing in a CONWIP fully automated assembly line *Arianna Alfieri, Claudio Castiglione and Erica Pastore*
11:20-11:40	Reciprocal human–machine learning flow modelling for assisted assembly systems *Yuchen Fan, Alessandro Simeone and Dario Antonelli*
11:40-12:00	Environmental Impact Assessment of Adhesive Joints in Basalt Fibre-Reinforced Thermoplastic Composites Using LCA Methodology *Luigi Benvenuto, Enrico Lertora, Chiara Mandolfino, Matteo Benvenuto, Marco Pizzorni and Pietro Russo*
12:00-12:20	Integrating buffer stock and buffer loops in a conveyor assembly line: an automotive case study *Claudio Castiglione, Erica Pastore and Arianna Alfieri*
12:20-12:40	Thermal and Joule effect debonding techniques: evaluation of mechanical strength and LCA analysis of bonded joints *Matteo Benvenuto, Enrico Lertora, Marco Pizzorni, Luigi Benvenuto, Alessia Lusiani and Chiara Mandolfino*
12:40-13:00	Fostering sustainability-oriented product innovation: a comprehensive framework to support product development for a circular economy *Luigi Panza, Giulia Bruno and Paolo Chiabert*

Campus Quagliariello Giovedì 11 settembre, 13:00 – 14:30	
13:00-14:30	Pranzo

Aula A - Campus Quagliariello Giovedì 11 settembre, 14:30 – 16:50 Sessione “Additive manufacturing and reverse engineering” *Presiedono: Nadia Ucciardello and Elena Bassoli*	
14:30-14:50	Impact of cell dimensions and beam radius on the bending characteristics of BCC sandwich panels produced via LPBF of Ti-6Al-4V *Dina Palmeri, Gaetano Pollara, Gianluca Buffa and Livan Fratini*

14:50-15:10	Effect of cyclic loading and thermal stimuli on the shape memory behavior of PLA 3D-Printed Cellular Structures *Maria Pia Desole and Annamaria Gisario*
15:10-15:30	From Design to Reality: Improving Multimaterial Laser Powder Bed Fusion Additive Manufacturing via In-Situ Monitoring *Stefania Cacace, Matteo Bugatti and Bianca Maria Colosimo*
15:30-15:50	Process capability investigation on the 3d printing technique for hybrid silica-based sands cores *Mukul Ramesh Kumar, Stefania Cacace, Maurizio Chiesa, Daniele Chiesa and Paolo Parenti*
15:50-16:10	Preliminary study on evaluation of printing parameters for a MEX repair application *Raniero Pirlo, Marco Lafirenza, Maria Grazia Guerra, Fulvio Lavecchia and Luigi Maria Galantucci*
16:10-16:30	Investigation of Strain Rate and Thermal Effects on Deformation-Induced Martensitic Transformation in QP1180 Steel for accurate FE Stamping Simulation *Maria Emanuela Palmieri, Matteo Villa, Michele Abruzzo, Giuseppe Macoretta, Stefania Bruschi and Luigi Tricarico*
16:30-16:50	Study of printing parameters on part performance in foamy TPU using Material Extrusion Technology *Francesco de Palma, Alessandro Pellegrini, Roberto Spina and Fulvio Lavecchia*

Aula B - Campus Quagliariello Giovedì 11 settembre, 14:30 – 16:10 Sessione “Materials processing technology” *Presiedono: Barbara Previtali and Alfonso Paoletti*	
14:30-14:50	Textured Tools and Cryogenic Cooling for Modifying Chip Morphology in PEEK Machining *Anna Bottin, Rachele Bertolini and Stefania Bruschi*
14:50-15:10	Comparison between the mechanical properties and environmental sustainability of Basalt and Carbon Fiber Reinforced Polymers filament wound components *Iacopo Bianchi, Massimo Di Pietro, Archimede Forcellese, Francesco Galliani, Tommaso Mancia, Chiara Mignanelli, Michela Simoncini and Tommaso Verdini*
15:10-15:30	Effect of heat shrinkable tape layer number on mechanical properties and quality of tubular CFRP components obtained by filament winding *Iacopo Bianchi, Archimede Forcellese, Chiara Mignanelli, Massimiliano Pieralisi, Michela Simoncini and Tommaso Verdini*

15:30-15:50	Comparative study of autoclave thermoforming and hot-press moulding for manufacturing green composite parts *Gianluca Parodo, Luca Sorrentino and Sandro Turchetta*
15:50-16:10	Laser texturing of 3D Copper current collector for ultrafast Zinc metal plating *Vincenzina Siciliani, Nassima Yamini, Riccardo Pelaccia, Andrea Paolella and Leonardo Orazi*

Aula B - Campus Quagliariello Giovedì 11 settembre, 16:10 – 16:50 Sessione "Miscellaneous" *Presiede: Enrico Savio*	
16:10-16:30	Nanoscale topographical characterisation of permeability-related features in the production of polymeric films for food packaging *Giacomo Maculotti, Alberto Piovano, Gianfranco Genta and Maurizio Galetto*
16:30-16:50	Design optimization and one-shot 3D printing of a bio-inspired soft robot capable of counter-flexural motion at low actuation pressures *Luca Di Leo, Alessio Pricci, Andrea Gravili and Gianluca Percoco*

Aula C - Campus Quagliariello Giovedì 11 settembre, 14:30 – 16:50 Sessione "Quality engineering and production metrology" *Presiede: Fiorenzo Franceschini and Simone Carmignato*	
14:30-14:50	Investigation of glass fiber-reinforced polypropylene properties dependence on post-consumer recycled polypropylene content *Anna Bortoletto, Matteo Michelini, Luca Gazzola, Adrian Kelly, Ben Whiteside, Marco Sorgato and Giovanni Lucchetta*
14:50-15:10	Impact of contour on surface quality, dimensional and geometrical accuracy of Ti48Al2Cr2Nb parts produced with powder bed fusion with electron beam process *Giovanni Rizza, Manuela Galati, Paolo Minetola, Paolo Antonioni, Danilo Bruson, Giovanni Marchiandi and Luca Iuliano*
15:10-15:30	Back-in-time quality inspection through Gaussian Splatting *Mattia Trombini, Domenico Augusto Francesco Maisano and Fiorenzo Franceschini*

15:30-15:50	Cognitive Assistance Systems in Manufacturing: A Multidimensional Conceptual Model *Mirco Bartolomei, Federico Barravecchia, Maria Rea, Luca Mastrogiacomo, Fiorenzo Franceschini and Davide Cannizzaro*
15:50-16:10	Detection of sub-superficial defects by Infrared Thermography in parts made by Powder Bed Fusion with Electron Beam *Silvio Defanti, Simone De Giorgi, Giovanni Rizza, Emanuele Tognoli, Giulia Colombini, Ahmet Ayberk Gürbüz, Lucia Denti, Manuela Galati and Luca Iuliano*
16:10-16:30	Real-time mental workload assessment with low intrusiveness for assembly processes: limits and preliminary results *Riccardo Gervasi, Matteo De Marchi, Luca Mastrogiacomo, Dominik T. Matt and Fiorenzo Franceschini*
16:30-16:50	Effect of cast extrusion parameters on the surface properties of films made of polyethylene blends with olefinic ionomers *Annalisa Genovesi, Alessandra Caggiano and Massimiliano Barletta*

Aula A - Campus Quagliariello Giovedì 11 settembre, 16:50 – 19:30	
16:50-19:30	Assemblea AITEM

PROGRAMMA
VENERDÌ 12 SETTEMBRE

Aula D- Campus Quagliariello Venerdì 12 settembre, 08:30 – 10:30 Sessione “Process and system simulation, optimization and digital manufacturing” *Presiede: Luca Mastrogiacomo*	
08:30-08:50	Digital Twin solutions for state-aware, dynamic task allocation in flexible Cyber-Physical Production Systems *Matteo De Marchi, Erwin Rauch and Dominik T. Matt*
08:50-09:10	Development of low environmental impact technological solutions based on PLA, PBS, PBAT and Talc blends for multilayer food packaging manufacturing *Marzio Milo di Villagrazia, Alessandra Caggiano, Annalisa Genovesi and Massimiliano Barletta*
09:10-09:30	Metaheuristic approaches for solving the scheduling problem in the semiconductor diffusion work area *Roberto Rosario Corsini, Antonio Costa, Valeria Fichera, Giuseppe Oriti and Daniele Pagano*
09:30-09:50	A mathematical modeling approach for job allocation at STMicroelectronics *Elias El Achkar, Nicla Frigerio, Daniele Pagano and Andrea Matta*
09:50-10:10	Digitalization of broaching processes: a scalable approach to industry 4.0 in small and medium enterprises *Michele Abruzzo, Gino Dini, Gualtiero Fantoni, Luca Romoli and Marko Vukovic*
10:10-10:30	A decisional framework for second-life applications of textile waste: a data-driven and generative ai approach *Giovanni de Martino, Rosa Leone, Marica Bucci and Michele Dassisti*

Aula E - Campus Quagliariello Venerdì 12 settembre, 08:30 – 09:50 Sessione “Miscellaneous” *Presiede: Luca Tomesani*	
08:30-08:50	Fabrication of Shape Memory Composites for Non-Explosive Release Mechanisms in Space Applications *Denise Bellisario, Leandro Iorio, Dounia Noqra, Giorgio Patrizii, Alice Proietti, Fabrizio Quadrini and Loredana Santo*
08:50-09:10	Towards Efficient Defect Detection in Injection Molding with Transformer Models *Andrea Pieressa, Marco Sorgato and Giovanni Lucchetta*

09:10-09:30	Supervised Autoencoder for Fault Detection and Diagnosis in Predictive Maintenance of Bearing Ring Grinding Machine *Pietro Andrea Miciaccia, Giovanni Pascoschi, Michele Dassisti, Domenico Monopoli, Antonio Decataldo and Concetta Semeraro*
09:30-09:50	An experimental approach exploiting high voltage fragmentation as a selective communication technology for the recovery of key metals *Marco Diani, Shravan Torvi and Marcello Colledani*

Aula E - Campus Quagliariello Venerdì 12 settembre, 09:50 – 10:30 Sessione “Process and system simulation, optimization and digital manufacturing” *Presiede: Tullio Tolio*	
09:50-10:10	Deep learning-based monitoring of Laser Beam Direct Energy Deposition to detect deviations in process conditions *Marco Mazzarisi, Maria Grazia Guerra, Andrea Angelastro, Luigi Maria Galantucci and Sabina Luisa Campanelli*
10:10-10:30	Field-Driven Design of Functionally Graded TPMS-Based 3D Printed Sandwich Structures: Modeling, Manufacturing and Testing *Gabriele Marabello and Guido Di Bella*

Aula B - Campus Quagliariello Venerdì 12 settembre, 08:30 – 09:30 Sessione “Quality engineering and production metrology” *Presiede: Valeria Fichera*	
08:30-08:50	Impact of Surface Determination Techniques on Dimensional and Geometrical Metrology Using X-ray Computed Tomography *Federico Pirillo, Huan Shao, Stefano Petrò and Giovanni Moroni*
08:50-09:10	Advanced Active Thermography for Weld Joint Inspection *Valentino Razza, Manuela De Maddis, Pasquale Russo Spena and Luca Santoro*
09:10-09:30	Document-type classification errors in bibliometric databases: insights from the engineering/manufacturing field *Domenico Augusto Maisano, Lucrezia Ferrara and Fiorenzo Franceschini*

Aula B - Campus Quagliariello Venerdì 12 settembre, 09:30 – 10:10 Sessione “Osservatori” *Presiede: Massimiliano Barletta*	
09:30-09:50	Sostenibilità nei processi e nei sistemi manifatturieri *Paolo Priarone*
09:50-10:10	Impatti dell'Intelligenza Artificiale nel settore manifatturiero *Luigi Nele*

Campus Quagliariello Venerdì 12 settembre, 10:30 – 11:00	
10:30-11:00	Coffee break

Aula D - Campus Quagliariello Venerdì 12 settembre, 11:00 – 12:30 Sessione “Work In Progress e Laboratori” *Presiede: Domenico Umbrello*	
11:00-11:15	An automatic system of handling and heating samples during dynamic hot compression tests *Giuseppe Soardi, Costantino Guerra, Miriam Seiti, Andrea Abeni, Aldo Attanasio and Elisabetta Ceretti*
11:15-11:30	A Technological Analysis and Prototype Design for Efficient and Flexible Stacking Processes *Sen Bai, Nicla Frigerio, Daniela Fontana and Andrea Matta*
11:30-11:45	Development of a repair strategy for a thin aluminium aerospace component through WAAM and dot-by-dot deposition *Gianni Campatelli, Gustavo Carvalho and Paolo Priarone*
11:45-12:00	Manufacturing Quotation Platform for Turned Parts: the PLAT4M Project *Antonio Scippa and Niccolò Grossi*
12:00-12:15	Preliminary Numerical and Experimental Investigation of Clamping Effects on One-Up Drilling of Stacked Aluminium Aerospace Components *Martina Panico, Massimo Durante, Antonio Langella and Luca Boccarusso*

12:15-12:30	Manufacturing of vitrimer matrix composite substrates for cold-spray coatings *Fausto Tucci, Barbara Palmieri, Alessia Serena Perna, Antonio Viscusi, Alfonso Martone and Antonello Astarita*

Aula E - Campus Quagliariello Venerdì 12 settembre, 11:00 – 12:30 Sessione "Companies' Talk" *Modera: Michele Dassisti*	
11:00-12:30	• Omron (omron.it/it/home) • Prima Additive (www.primaadditive.com/it) • Roboze (www.roboze.com/it/) • ECOTRE VALENTE S.r.l. (www.ecotre.it) • Morphica (morphica.eu) • G-NOUS (g-nous.com) • MARTUR FOMPAK (www.marturfompak.com) • INTESA- ESG Lab (group.intesasanpaolo.com) • MOOV3 (www.moov3.it) • SKF Industrie SPA (www.skf.com/it) • FPT INDUSTRIE (www.fptindustrie.com/ita/)

Campus Quagliariello Venerdì 12 settembre, 13:00 – 14:30	
13:00-14:30	Pranzo

Aula Magna "Orabona" – Campus Quagliariello Venerdì 12 settembre, 14:30 – 16:00 Sessione "White paper" *Presiede: Luigi Maria Galantucci*	
14:30-15:00	Adaptive and sustainable manufacturing processes for profiles and tubes: Challenges and Innovations *Enrico Simonetto, Antonio Fiorentino, Tommaso Mancia, Matteo Strano*

15:00-15:30	Machining of Critical Aerospace Components: Challenges and Case studies *Niccolò Grossi, Paolo Albertelli, Rachele Bertolini, Alessandra Caggiano, Gianni Campatelli, Matteo Cragnolini, Andrea Lelio Maurizio, Luigi Nele, Paolo C. Priarone, Antonio Scippa, Marco Sortino, Giovanni Totis, Sandro Turchetta*
15:30-16:00	Challenges and Opportunities for Composite Manufacturing from a Sustainable Perspective *Luca Boccarusso, Vincenza Antonucci, Iacopo Bianchi, Pierpaolo Carlone, Lorenzo Donati, Antonio Langella, Gianluca Parodo, Fabrizio Quadrini, Luca Raimondi, Maria Rosaria Ricciardi, Loredana Santo, Michela Simoncini, Luca Sorrentino, Fausto Tucci*

Aula Magna "Orabona" – Campus Quagliariello Venerdì 12 settembre, 16:00 – 16:30	
16:00-16:30	Chiusura XVII Convegno AITEM e saluti