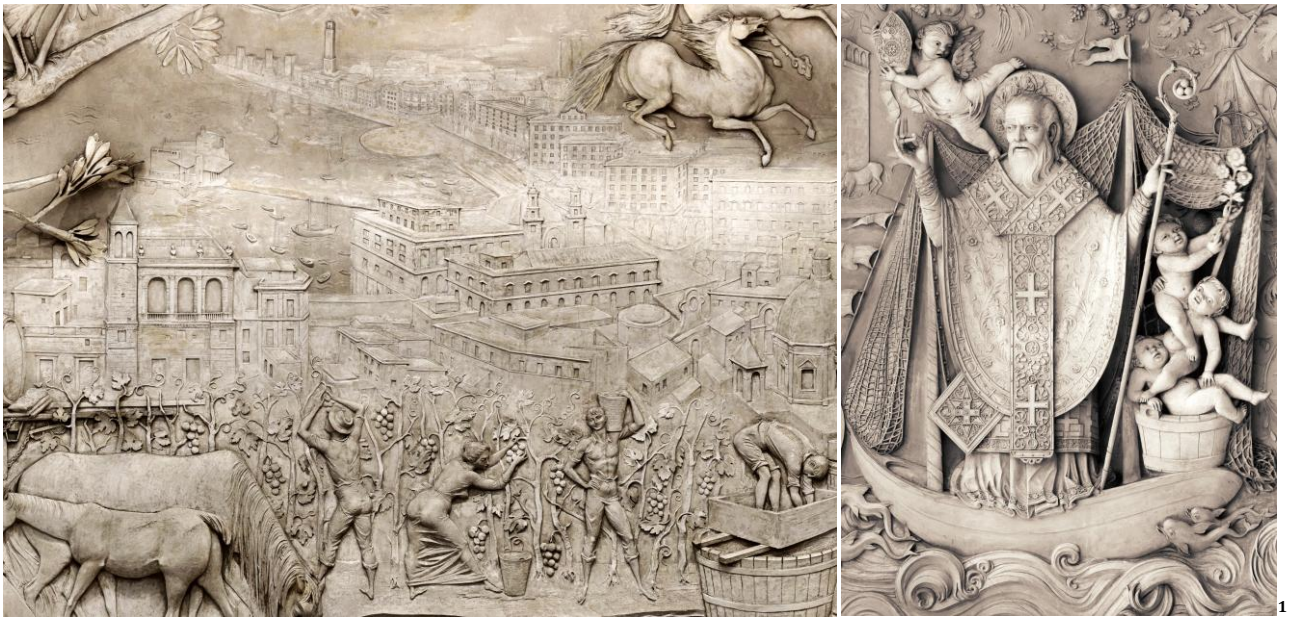
[1]

XVII CONVEGNO AITEM

ASSOCIAZIONE ITALIANA
DELLE TECNOLOGIE MANIFATTURIERE

Politecnico di Bari 9-12 settembre 2025

PROGRAMMA

[1] Elaborazione grafica dalla scansione 3D fatta dagli studenti del Politecnico di Bari sul bassorilievo in ceramica "*Allegorie Pugliesi e della Storia della Puglia*", di Francesco Barbieri, realizzato nel 1951 nella ex Banca Commerciale Italiana, ora OVS Bari, Via Abate Giacinto Gimma, 87.

XVII CONVEGNO AITEM

ASSOCIAZIONE ITALIANA DELLE TECNOLOGIE MANIFATTURIERE

COMITATO EDITORIALE

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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

MARTEDÌ 09 SETTEMBRE

Sala Riunioni 1° piano DMMM - Campus Quagliariello Martedì 09 settembre, 15:00 – 18:00	
15:00-18:00	Riunione del Consiglio Direttivo

Sala Riunioni 2° 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 www.museoarcheologicosantascolastica.it Martedì 09 settembre, 17:00 – 21:00	
17:00-19:00	Visita guidata al Museo Archeologico del Monastero Santa Scolastica
19:00-21:00	Cocktail di benvenuto

MERCOLEDÌ 10 SETTEMBRE

Aula Magna "Attilio Alto" – Campus Quagliariello Mercoledì 10 settembre, 08:00 – 10:30 Apertura XVII Convegno AITEM *Presiede: Luigi Maria Galantucci – Politecnico di Bari*	
08:00-09:00	Registrazione
09:00-09:30	Saluti di Apertura • Prof. Ing. Luigi Maria Galantucci, Presidente Onorario del Comitato Organizzatore • Prof. Ing. Francesco Cupertino, Magnifico Rettore del Politecnico di Bari • Prof.ssa Ing. Ilaria Filomena Giannoccaro, Direttrice del Dipartimento di Meccanica, Matematica e Management, Politecnico di Bari • On. Dott. Vito Leccese, Sindaco di Bari e Presidente della Città Metropolitana • Dott.ssa Gianna Elisa Berlingerio, Direttora Dip. Sviluppo Economico Regione Puglia • Prof. Ing. Luca Settineri, Presidente AITEM
09:30-09:50	Keynote 1: La intelligenza artificiale per il futuro della ricerca - Prof. Roberto Bellotti (Direttore Dip. Interuniversitario di Fisica, Università degli Studi di Bari - Aldo Moro)
09:50-10:10	Keynote 2: Prospettive e sfide future dell'aerospazio: 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 Omnidirectional 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 – 19:00	
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
22:30-23:00	After-dinners speech – "Le Tecnologie Italiane tra passato e futuro"– Raimondo Pasquino

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 e Alberto Boschetto; II parte – Fabrizio Capece Minutolo e 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 behaviour 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 e Mohamad El Mehtedi; II parte - Luca Romoli e 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 – Raimondo Pasquino e Stefano Guarino; II parte - Marcello Colledani e 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: Antonio Domenico Ludovico e Nadia Ucciardello*	
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 behaviour 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: Alfredo Anglani, Barbara Previtali e 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	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*

Aula C - Campus Quagliariello Giovedì 11 settembre, 14:30 – 16:50 Sessione “Quality engineering and production metrology” *Presiedono: Leonardo De Chiffre e Fiorenzo Franceschini*	
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

VENERDÌ 12 SETTEMBRE

Aula D- Campus Quagliariello Venerdì 12 settembre, 08:30 – 10:30 Sessione "Process and system simulation, optimization and digital manufacturing" *Presiedono: Quirico Semeraro e 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" *Presiedono: Luca Tomesani*	
08:30-08:50	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*
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 comminution 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: Sergio 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: Gianfranco Palumbo*	
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” *Presiedono: 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 – 13:00 Sessione "Companies' Talk" *Tech trends, tendenze e scenari per la manifattura italiana* *Modera e conduce: giornalista Franco Canna*	
11:00-13:00	• 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/) • Key4 (https://www.key-4.com/)

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



Elaborazione grafica dalla scansione 3D fatta dagli studenti del Politecnico di Bari sul bassorilievo in ceramica "Allegorie Pugliesi e della Storia della Puglia", di Francesco Barbieri, realizzato nel 1951 nella ex Banca Commerciale Italiana, ora OVS Bari, Via Abate Giacinto Gimma, 87.

PROGRAMMA

XVII CONVEGNO AITEM

ASSOCIAZIONE ITALIANA DELLE TECNOLOGIE MANIFATTURIERE

Politecnico di Bari 9-12 settembre 2025

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