

## ANA&A-SIMAI 2026 PROGRAM

<b>Thursday, April 9 – Room C (courtyard, ground floor)</b>	
08:30–09:10	<b>Registration</b>
09:10–09:30	<b>Meeting opening</b>
09:30–09:55	<i>Chair: D. OCCORSIO</i> V. FRANCALANZA: <i>Invariant Imbedding Methods for wave propagation and absorption in inhomogeneous media: a stochastic approach applied to fast magnetosonic wave coupling in fusion plasmas</i>
09:55–10:20	D. BORGOGNO: <i>Magnetic chaos in plasmas</i>
10:20–10:45	D. GRASSO: <i>Effect of magnetic chaos on relativistic electrons in tokamaks</i>
10:45–11:15	<b>Coffee break</b>
11:15–11:40	<i>Chair: D. CONTE</i> Y. CARIDI: <i>Advancements of HEMSim Software</i>
11:40–12:05	D. MEZZANOTTE: <i>Numerical treatment of 2D Volterra-Fredholm Integral Equations over equally spaced grids</i>
12:05–12:30	F. ACCORNERO: <i>Static-kinematic Duality and its crucial role in Computational Mechanics: From the adjoint matrix-operator to the Ritz-Galerkin Method</i>
12:30–14:30	<b>Lunch time</b>
14:30–18.30	<b>Industrial Session</b>
14:30–14:50	<i>Chair: C. CESARANO</i> V. MANUELLO (PRIMA POWER): <i>Raccolta ed analisi dati per applicazioni industriali di lavorazione lamiera</i>
14:50–15:10	E. BOGGIO SELLA (BOCCA MALANDRONE SRL): <i>Le reti KAN applicate alla analisi delle serie finanziarie</i>
15:10–15:30	M. BELLINZONA (DEDA AI): <i>TBA</i>
15:30–15:50	L. FANTAUZZO (DMA SRL): <i>Data-Driven Applications in Railway Infrastructure Diagnostics</i>
15:50–16:20	<b>Coffee break</b>
16:20–16:40	<i>Chair: A. DE ROSSI</i> V. GENOVESE (MEDIRECT BANK): <i>Common statistical and data manipulation difficulties in banking</i>
16:40–17:00	W. FERRARESE (ORCHESTRA SRL): <i>TBA</i>
17:00–17:20	G. AMATO (TEORES GROUP): <i>Metodologie di Approssimazione e Intelligenza Artificiale per l'Analisi Predittiva in Ambito Industriale e Finanziario</i>
17:20–17:40	G. BOCCHI (ARAKNE): <i>Financial Time Series Generation via Schrödinger Bridges: Theory, Implementation, and Extensions</i>
17:40–18:30	<i>Moderators: C. CESARANO, A. DE ROSSI</i> <b>Round table</b>
20:00	<b>Social dinner</b> at “La Nuova Spada Reale” Restaurant – Via Principe Amedeo 53, 10123 Torino

<b>Friday, April 10 – Room C (courtyard, ground floor)</b>	
09:00–09:25	<i>Chair: I. NOTARANGELO</i> I. SANTANIELLO: <i>A Machine Learning Approach to analyze Energy Consumption in HPC DC CRESCO7</i>
09:25–09:50	G. PAGANO: <i>Parameters Estimation in Vegetation Models via Numerical Optimization and CNNs</i>
09:50–10:15	S. ISCARO: <i>On the use of efficient numerical techniques to solve multidimensional parabolic PDEs arising from applications</i>
10:15–10:40	A. HAIDER: <i>Optimizing Basis Functions in KANs for Function Approximation</i>
10:40–11:10	<b>Coffee break</b>
11:10–11:35	<i>Chair: R. CAVORETTO</i> M. F. HEREDIA MOYANO: <i>Using Mathematica Wolfram to study zero distribution and the mesh of polynomials</i>
11:35–12:00	P. BUITRON: <i>A Generalized Laplace-Beltrami Operator in Anisotropic Geometries</i>
12:00–12:25	S. F. HASHEMI: <i>Analytical Approaches to Differential Equations</i>
12:25–14:30	<b>Lunch time</b>
14:30–14:55	<i>Chair: C. CESARANO</i> Y. QUINTANA (ONLINE): <i>On degenerate Appell sequences via Caputo-type fractional difference operator</i>
14:55–15:20	R. INGELMO VICENTE (ONLINE): <i>On degenerate Bernstein forms and their computational features</i>
15:20–15:45	W. RAMIREZ (ONLINE): <i>Generalized degenerate tangent polynomials and their associated matrices</i>
15:45–16:00	<b>Conclusions &amp; Greetings</b>