

Rapporto Annuale 2024/2025

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Introduzione

L'Istituto Dalle Molle di studi sull'intelligenza artificiale (IDSIA USI-SUPSI) è un istituto congiunto della [Facoltà di scienze informatiche](#) dell'[Università della Svizzera italiana \(USI\)](#) e del [Dipartimento tecnologie innovative](#) della [Scuola universitaria professionale della Svizzera italiana \(SUPSI\)](#) – il suo ruolo di “ponte” tra le due istituzioni ne caratterizza in modo distintivo l'approccio alla ricerca e all'innovazione.

La ricerca dell'istituto si articola sulle seguenti aree:

- ♦ robotica autonoma
- ♦ controllo intelligente per sistemi in rete
- ♦ geometria computazionale e visione artificiale
- ♦ apprendimento automatico e reti neurali artificiali
- ♦ elaborazione del linguaggio naturale e recupero delle informazioni
- ♦ intelligenza artificiale responsabile e società
- ♦ teoria e algoritmi.

Riconosciuto a livello internazionale tra i centri pionieri negli studi sull'IA, l'istituto svolge attività di insegnamento e ricerca di base e applicata nell'ambito dell'intelligenza artificiale con importanti ricadute a favore dell'industria e dell'economia e in collaborazione con aziende e istituzioni.

Oltre alle aree elencate, IDSIA si concentra anche su aree applicative come l'IA per l'industria e la finanza, l'IA per la salute e le scienze della vita e l'IA per l'energia e l'ambiente.

L'Istituto è fortemente impegnato nel trasferimento delle conoscenze tramite attività di formazione e mentoring a livello di Bachelor, Master e dottorato, con la partecipazione delle proprie ricercatrici e dei propri ricercatori all'insegnamento nei programmi accademici offerti in USI e in SUPSI.

Oltre alla ricerca e alla didattica, l'istituto contribuisce al dibattito pubblico sull'intelligenza artificiale etica, con un'attenzione particolare ai temi della trasparenza e dell'equità degli algoritmi di apprendimento automatico; è attivo nell'organizzazione di eventi scientifici come parte delle sue attività di divulgazione, tra cui conferenze internazionali, scuole estive e workshop.

I dati qui di seguito si riferiscono alle attività delle ricercatrici e dei ricercatori IDSIA-USI.

Progetti finanziati 2024/2025

In corso

- ♦ Gruppo Alippi
 - Alippi, Lifelong Learning on large-scale and structured data (OCRE Cloud Adoption Funding, 2022-2026)
 - Alippi, Ferrante, Graph-based Investigation of Insect Spread Dynamics
 - Alippi, Ferrante, Diagnostica dei sistemi di trasmissione segnali radio e tv tramite tecniche tradizionali e di intelligenza artificiale. Direct mandate.
 - Regazzoni, MYRTUS - Multi-layer 360° dYnamic orchestrion and interopeRable design environmenT for compute-continUum Systems
 - HORD GNN - Higher-Order Relations and Dynamics in Graph Neural Networks
- ♦ Gruppo Crestani
 - PACINO - Personality And Conversational INformatiOn Access
 - OPINION - What are Opinions? Integrating Theory and Methods for Automatically Analyzing Opinionated Communication
- ♦ Gruppo Didyk
 - AiChemist - Explainable AI for Molecules - AiChemist
 - Perception-aware Optimizations for Appearance and Tactile Fabrication
- ♦ Gruppo Gambardella
 - Gambardella, Mastrolilli, Computational methods for integrality gaps analysis
- ♦ Gruppo Hormann
 - Coordinate-based representations of time-varying meshes
- ♦ Gruppo Landoni
 - SOL - Scaffolding to foster independence when children search Online for Learning
 - TADAA - Tools for Assessing and Developing Affecting & Attractive Narratives for Girls in Informatics
 - BBC - Breaking Boundaries in K-12 Classrooms: Fostering Gender Inclusion in STEM Teaching
- ♦ Gruppo Multerer
 - Baroli, Multerer, Cyber-Physical systems and digital twins for the decarbonisation of energy-intensive industries
 - Multiresolution methods for unstructured data
 - Schneider, Multerer, Large-scale kernel methods in financial economics
- ♦ Gruppo Papadopoulou
 - Dimension ++ (until 30.11.2025)
- ♦ Gruppo Sharygina
 - Cross theory rigorous program verification using Constrained Horn clauses
 - Sharygina, Hyvärinen, Formal Reasoning on Neural Networks

Conclusi

- ♦ Gruppo Alippi
 - Calibrated uncertainty estimation for spatiotemporal data
- ♦ Gruppo Crestani
 - PACAM - Personality Aware Conversational Agent for mental health support
 - Evaluation of Empathic Conversational Search for Depression assessment & support
 - ord47 - Open research data for the 7th art
 - ReMO - Researcher Mental Health
- ♦ Gruppo Didyk
 - PERDY - Perceptually-Driven Optimizations of Graphics Content for Novel Displays
- ♦ Gruppo Gambardella
 - (Piatti) Assessing the development of computational thinking skills through an intelligent tutoring system: an exploratory study in the cantons of St Gallen, Vaud and Ticino.
- ♦ Gruppo Hormann
 - Construction and implementation of efficient high-order numerical methods for Volterra integral equations
 - Barycentric Interpolation
- ♦ Gruppo Landoni
 - EUGAIN - European Network For Gender Balance in Informatics
- ♦ Gruppo Papadopoulou
 - Dimension++
- ♦ Gruppo Schmidhuber
 - NEUSYM - NEUSYM
- ♦ Gruppo Sharygina
 - Beyond Symbolic Model Checking through Deep Modelling

Pubblicazioni 2024/2025

- ♦ Gruppo Alippi
 - L. Butera, G. De Felice, A. Cini, C. Alippi. On the Regularization of Learnable Embeddings for Time Series Forecasting. Transactions on Machine Learning Research, 2025.
 - F. Leveni, L. Magri, C. Alippi, G. Boracchi, Preference Isolation Forest for Structure-based Anomaly Detection, Pattern Recognition, 2025
 - L. Crupi, L. Butera, A. Ferrante, A. Giusti, D. Palossi, An Efficient Ground-aerial Transportation System for Pest Control Enabled by AI-based Autonomous Nano-UAVs, ACM Journal on Autonomous Transportation Systems.

- Lidia Pocero Fraile, Georgios Tasopoulos, Christos Koulamas, Raymond K. Zhao, Nazatul Haque Sultan, Francesco Regazzoni, Apostolos P. Fournaris, Enabling Quantum-Resistant EDHOC: Design and Performance Evaluation. IEEE Access 13: 75861-75884 (2025)
- Jin, M., Koh, H. Y., Wen, Q., Zambon, D., Alippi, C., Webb, G. I., King, I., & Pan, S. (2024). A Survey on Graph Neural Networks for Time Series: Forecasting, Classification, Imputation, and Anomaly Detection. IEEE Transactions on Pattern Analysis and Machine Intelligence, 46(12), 10466-10485.
- Marzi, T., Khehra, A. S., Cini, A., & Alippi, C. (2023). Feudal Graph Reinforcement Learning. Transactions on Machine Learning Research.
- A. Cini, A. Jenkins, D. Mandic, C. Alippi, F. M. Bianchi, Relational Conformal Prediction for Correlated Time Series, ICML 2025.
- C.Crognale, A.M. Rizzo, M.O. Nogara Notarianni, G.Boracchi, L.Magri, C.Alippi, P.Invernizzi, G. Martinelli, R.Manzotti, S.Binetti, A Novel ML-Based Approach to Anomaly Detection in Optical Networks, In Proc. Optica Advanced Photonics Congress 2025.
- Manenti,, D. Zambon,, C. Alippi. Learning Latent Graph Structures and their Uncertainty, International Conference on Machine Learning, 2025
- Marisca, J. Bamberger, C. Alippi, M. Bronstein. Over-squashing in Spatiotemporal Graph Neural Networks. Advances in Neural Information Processing Systems, 2025 (NeurIPS)
- Thakur, S., Banik, S., & Regazzoni, F. (2024). Energy Analysis of Cryptographic Algorithms in Server Environment. In Proceedings of the 2024 ACM Cloud Computing Security Workshop (CCSW '24), October 18, 2024, Salt Lake City, UT, USA. ACM, New York, NY, USA.
- ◆ Schmid, M., Arul, T., Kavun, E. B., Regazzoni, F., & Kara, O. (2024). Robust and Energy-Efficient Hardware Architectures for DIZY Stream Cipher. In Proceedings of the 2024 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS), November 7-9, 2024, Taipei, Taiwan. IEEE.
- ◆ Gruppo Crestani
 - Teng, Teoh Hwai; Varathan, Kasturi Dewi; Crestani, Fabio; A comprehensive review of cyberbullying-related content classification in online social media. Expert Systems with Applications, 244: 122644, 2024
 - Kamps, Jaap; Goeuriot, Lorraine; Crestani, Fabio; Advances in information retrieval collection on the European conference on information retrieval 2023, Discover Computing, 27, 1, 9, 2024
 - Sekulić, Ivan; Alinannejadi, Mohammad; Crestani, Fabio; Analysing utterances in LLM-based user simulation for conversational search, ACM Transactions on Intelligent Systems and Technology, 15, 3, 2024
 - Ravenda, Federico; Bahrainian, Seyed Ali; Raballo, Andrea; Mira, Antonietta; Crestani, Fabio; A self-supervised seed-driven approach to topic modelling and clustering, Journal of Intelligent Information Systems, 63, 1, 333-353, 2025
 - Ríssola, Esteban A; Aragón, Mario Ezra; Losada, David E; Crestani, Fabio; On the incidence of depression symptoms on social media, Journal of Computational Social Science, 8, 2, 48, 2025
 - Ravenda, Federico; Preti, Antonio; Poletti, Michele; Mira, Antonietta; Crestani, Fabio; Raballo, Andrea; Transforming social media text into predictive tools for depression

through AI: A test-case study on the Beck Depression Inventory-II, PLOS Digital Health, 4, 6, e0000848, 2025

- ◆ Gruppo Didyk

- Condor, Jorge, et al. "Don't Splat your Gaussians: Volumetric Ray-Traced Primitives for Modeling and Rendering Scattering and Emissive Media." ACM Transactions on Graphics 44.1 (2025)
- Yurtsever, Mehmet Ata, and Piotr Didyk. "Reducing Visible Staircasing Artifacts Through Printing Orientation Using a Perception-Driven Metric." Proceedings of the Pacific Graphics. 2025.
- Cantory, Ville, et al. "Enhancing Foveated Rendering with Weighted Reservoir Sampling." Proceedings of the 2025 18th ACM SIGGRAPH Conference on Motion, Interaction, and Games. 2025.
- Karpenko, Volodymyr, et al. "Human Vision Constrained Super-Resolution." Proceedings of the IEEE/CVF International Conference on Computer Vision. 2025.
- Hermann, Nicolai, et al. "Puzzle Similarity: A Perceptually-guided Cross-Reference Metric for Artifact Detection in 3D Scene Reconstructions." Proceedings of the IEEE/CVF International Conference on Computer Vision. 2025.
- Surace, Luca, et al. "Temporal Brightness Management for Immersive Content." Proceedings of the Eurographics Symposium on Rendering. 2025.
- Kergaßner, Sophie, et al. "Towards Understanding Depth Perception in Foveated Rendering." Proceedings of the Special Interest Group on Computer Graphics and Interactive Techniques Conference Conference Papers. 2025.

- ◆ Gruppo Hormann

- R. Fu, K. Hormann, and P. Alliez. LFS-aware surface reconstruction from unoriented 3D point clouds. IEEE Transactions on Multimedia, 26:11415–11427, 2024.
- C. Fuda and K. Hormann. Algorithm 1048: A C++ class for robust linear barycentric rational interpolation. ACM Transactions on Mathematical Software, 50(3):Article 23, 17 pages, September 2024.
- C. Fuda, A. Ramanantoanina, and K. Hormann. A comprehensive comparison of algorithms for evaluating rational Bézier curves. Dolomites Research Notes on Approximation, 17(3):56–79, September 2024.
- A. Ramanantoanina and K. Hormann. Trigonometric tangent interpolating curves. In R. Chen, T. Ritschel, and E. Whiting, editors, Pacific Graphics Conference Papers and Posters, pages 1–8, Huangshan, China, October 2024. Eurographics Association.
- K. Hormann and C. Mancinelli. Curvature continuous corner cutting. Computer Aided Geometric Design, 114:Article 102392, 13 pages, November 2024.
- Q. Chang and K. Hormann. Transfinite barycentric coordinates for arbitrary planar domains. Computer Aided Geometric Design, 119:Article 102433, 13 pages, June 2025.

- ◆ Gruppo Landoni

- I. Zanardi. Technology as a Mirror: Encouraging Children's Reflection on Gender Equity. In Proceedings of the 24th Interaction Design and Children (IDC '25). Association for Computing Machinery, New York, NY, USA, 1168–1171.2025
<https://doi.org/10.1145/3713043.3731601>
- I. Zanardi, S. Dedò, and M. Landoni. On the Good-Enough Effect: Children Reflect on their AI-Generated Portraits. In Proceedings of the 24th Interaction Design and Children

(IDC '25). Association for Computing Machinery, New York, NY, USA, 154–167.
<https://doi.org/10.1145/3713043.3733253.2>. 2025.

- D. M. Tobia, S. Dedò, I. Zanardi, and M. Landoni. 2025. Smoke in the Water: Raising Awareness on Noise Pollution Through Interactive Art. In Companion Publication of the 2025 ACM Designing Interactive Systems Conference (DIS '25 Companion). Association for Computing Machinery, New York, NY, USA, 175–183.
<https://doi.org/10.1145/3715668.3736390>. 2025.
- D. M. Tobia and M. Landoni. Quest for knowledge: Design of an interactive game to trace children's search experience. In Proceedings of the 24th Interaction Design and Children (IDC '25). Association for Computing Machinery, New York, NY, USA, 932–937.
<https://doi.org/10.1145/3713043.3731509.2025>.
- H. Chakrabarti, D. Micol Tobia, M. Landoni, and M. S. Pera. Inside Out 2: Make Room for New Emotions & LLM: A Reproducibility Study of the Emotional Side of Search in the Classroom. In Proceedings of the 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR '25). Association for Computing Machinery, New York, NY, USA, 3244–3254.
<https://doi.org/10.1145/3726302.3730315>. 2025.
- M. S. Pera, T. Huibers, E. Murgia, and M. Landoni. Some Things Never Change: Overcoming Persistent Challenges in Children IR. In Proceedings of the 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR '25). Association for Computing Machinery, New York, NY, USA, 3107–3109. <https://doi.org/10.1145/3726302.3730270> 2025.
- L. S. Guedes, I. Zanardi, S. Span, M. Landoni. EmpowerBox: Multisensory Box for Storytelling with People with Intellectual Disabilities. In: Ardito, C., et al. Human-Computer Interaction – INTERACT 2025. INTERACT 2025. Lecture Notes in Computer Science, vol 16108. Springer, Cham. https://doi.org/10.1007/978-3-032-04999-5_5. 2025.
- E. Murgia, M. Landoni, T. Huibers, and M.S. Pera. Empowered or Lost? How Search Tools and Social Networks Shape Teen Learning in an AI World. In L. Boratto, A. De Filippo, S. Marchesin, & M. Marras (Eds.), Proceedings of the 15th Italian Information Retrieval Workshop (IIR 2025) : Cagliari, Italy, September 3-5, 2025 (Vol. 4026, pp. 7-19). (CEUR Workshop Proceedings). 2025..
- B. Penzenstadler, M. Landoni, A. Takaoka, S. Caner-Yıldırım, K. Boudaoud, A. Di Marco. How to Read This Book: Personas Guiding Through EUGAIN Results. In: Penzenstadler, B., Boudaoud, K., Di Marco, A., Caner-Yıldırım, S. (eds) Actions for Gender Balance in Informatics Across Europe. Springer, Cham.
https://doi.org/10.1007/978-3-031-78432-3_1. 2025.
- D. M. Tobia, V. Kotov, M. Landoni. . Finding Nemo: A Serious Game to Raise Children's Awareness of Information Pollution. In: Bellogin, A., et al. Advances in Bias, Fairness, and Understudied Users in Information Retrieval. IR4U2 BIAS 2025 Communications in Computer and Information Science, vol 2786. Springer, Cham.
https://doi.org/10.1007/978-3-032-12717-4_7. 2025.

◆ Gruppo Multerer

- J. Dölz, W. Huang, and M. Multerer. p-Multilevel Monte Carlo for acoustic scattering from large deviation rough random surfaces. SIAM/ASA J. Uncertain. Quantif., 13(4):1950–1971, 2025.
- S. Avesani, R. Kempf, M. Multerer, and H. Wendland. Multiscale scattered data analysis in samplet coordinates. SIAM J. Sci. Comput., 47(5):A3038–A3063, 2025.

- H. Harbrecht, M. Multerer, and J. Quizi. The dimension weighted fast multipole method for scattered data approximation. *J. Comput. Phys.*, 532:113956, 2025.
- W. Huang, M. Valsecchi, and M. Multerer. Anisotropic multiresolution analyses for deepfake detection. *Pattern Recognit.*, 164:111551, 2025.
- H. Harbrecht, R. Kempf, and M. Multerer. Construction of quasi-localized dual bases in reproducing kernel Hilbert spaces. *J. Comput. Appl. Math.*, 465:116545, 2025.
- D. Filipovic, M. Multerer, and P. Schneider. Adaptive joint distribution learning. *SIAM J. Math. Data Sci.*, 7:28–54, 2025.
- J. Dölz, H. Harbrecht, and M. Multerer. Solving acoustic scattering problems by the isogeometric boundary element method. *Eng. Comput.*, 40:3651–3661, 2024.
- M. Multerer, P. Schneider, and R. Sen. Fast empirical scenarios. *J. Comput. Math. Data Sci.*, 12:100099, 2024.
- H. Harbrecht, M. Multerer, O. Schenk, and C. Schwab. Multiresolution kernel matrix algebra. *Numer. Math.*, 156(3):1085–1114, 2024.
- D. Baroli, H. Harbrecht, and M. Multerer. Samplet basis pursuit: Multiresolution scattered data approximation with sparsity constraints. *IEEE Trans. Signal Process.*, 72:1813–1823, 2024.
- ◆ Gruppo Papadopoulou
 - I. Mantas, E. Papadopoulou, R.I. Silveira, and Z. Wang. The farthest color Voronoi diagram in the plane. *Algorithmica*, 87:1393–1419, published June 2025.
 - S.W. Bae, N. Oliver, and E. Papadopoulou. Higher-order color Voronoi diagrams and the colorful Clarkson–Shor framework. In *Proc. 41st International Symposium on Computational Geometry (SoCG)*, volume 332 of LIPIcs, 2025. (Full version: arXiv:2504.06960v1, 43 pages).
 - E. Papadopoulou, J. Xu, and L. Xu. Map of geometric minimal cuts with applications. In P. M. Pardalos, D. Z. Du, and M. T. Thai, editors, *Handbook of Combinatorial Optimization*, chapter 27, pages 1–55. Springer, 2025.
 - M. Suderland E. Papadopoulou and Z. Wang. On the Voronoi diagram of four lines in three dimensions. In *Abstracts 41st European Workshop on Computational Geometry (EuroCG)*, 2025.
 - M. Suderland E. Papadopoulou and Z. Wang. A collapse algorithm for farthest Voronoi diagrams in three dimensions. In *Abstracts 41st European Workshop on Computational Geometry (EuroCG)*, 2025.

Presentazioni a conferenze

- ◆ Gruppo Crestani
 - Sekulić, Ivan; Lu, Lili; Bedi, Navdeep Singh; Crestani, Fabio; Simulating conversational search users with parameterized behavior, *Proceedings of the 2024 Annual International ACM SIGIR Conference on Research and Development in Information Retrieval in the Asia Pacific Region*, 72-81, 2024
 - Bedi, Navdeep Singh; Sekulić, Ivan; Crestani, Fabio; Clarifying Questions Generation for Conversational Search Based on “People Also Ask” Feature, *International Conference on Asian Digital Libraries*, 246-260, 2024
 - De Grandi, Alessandro; Ravenda, Federico; Raballo, Andrea; Crestani, Fabio; The emotional spectrum of LLMs: Leveraging empathy and emotion-based markers for

- mental health support, Proceedings of the 10th Workshop on Computational Linguistics and Clinical Psychology (CLPsych 2025), 26-43, 2025
- Lu, Lili; Meng, Chuan; Ravenda, Federico; Aliannejadi, Mohammad; Crestani, Fabio; Zero-shot and efficient clarification need prediction in conversational search. European Conference on Information Retrieval, 389-404, 2025
 - Parapar, Javier; Perez, Anxo; Wang, Xi; Crestani, Fabio; eRisk 2025: contextual and conversational approaches for depression challenges, European Conference on Information Retrieval, 416-424, 2025
 - Ravenda, Federico; Bahrainian, Seyed Ali; Kando, Noriko; Mira, Antonietta; Raballo, Andrea; Crestani, Fabio; Tailoring adaptive-zero-shot retrieval and probabilistic modelling for psychometric data, Proceedings of the 40th ACM/SIGAPP Symposium on Applied Computing, 1014-1018, 2025
 - Mousavian, Maryam; Abbasiantaeb, Zahra; Aliannejadi, Mohammad; Crestani, Fabio; Towards Fair Rankings: Leveraging LLMs for Gender Bias Detection and Measurement, Proceedings of the 2025 International ACM SIGIR Conference on Innovative Concepts and Theories in Information Retrieval (ICTIR), 56-66, 2025
 - Fu, Xiao; Bedi, Navdeep Singh; Crestani, Fabio; Lipani, Aldo; Normalized Set-Level Ideal DCG: A More Reliable Early-Stage Retrieval Metric, Proceedings of the 2025 International ACM SIGIR Conference on Innovative Concepts and Theories in Information Retrieval (ICTIR), 488-496, 2025
- ◆ Gruppo Didyk
 - All publications have been presented at the corresponding conferences by the first authors.
 - ◆ Gruppo Hormann
 - A. Ramanantoanina. Trigonometric tangent interpolating curves. Pacific Graphics Conference, Huangshan, China, October 2024.
 - Q. Chang. Transfinite barycentric coordinates for arbitrary planar domains. Geometric Modeling and Processing, St. Louis, USA, May 2025.
 - K. Hormann. Curvature continuous corner cutting. Geometric Modeling and Processing, St. Louis, USA, May 2025.
 - K. Hormann. New characterizations of planar quintic Pythagorean-hodograph curves. SIAM Conference on Computational Geometric Design, Montreal, Canada, July 2025.
 - ◆ Gruppo Papadopoulos
 - N. Oliver. Higher-order color Voronoi diagrams and the colorful Clarkson–Shor framework. 41st International Symposium on Computational Geometry (SoCG 2025), Kanazawa, Japan, June 2025.
 - Z. Wang. On the Voronoi diagram of four lines in three dimensions. 41st European Workshop on Computational Geometry (EuroCG2 025), Liblice, Czech Republic, April 2025.
 - M. Suderland. A collapse algorithm for farthest Voronoi diagrams in three dimensions. 41st European Workshop on Computational Geometry (EuroCG 2025), Liblice, Czech Republic, April 2025.

Collaborazioni principali

In corso

- ♦ Gruppo Alippi
 - ongoing collaboration with MeteoSwiss, resulting in joint publications (currently in review) and student projects.
 - The group of C. Alippi hosted the following visiting PhD students:
 - Giovanni De Felice, PhD student at the University of Liverpool (UK)
 - Alexander Jenkins, PhD student at the Imperial College London (UK)
 - Andrea Fantinato, PhD student at the Università degli Studi di Pavia (IT)
 - Luca Colombo, PhD student at the Politecnico di Milano (IT)
 - Ivan Marisca, PhD student in the group of C. Alippi, was hosted for 6 months at the University of Oxford, by Prof. Michael Bronstein, as part of the USI Doc.Mobility program.
 - Another collaboration with Imperial College London (Prof Danilo Mandic, Dr Fu Siong Ng, Alexander Jenkins) has also been established.
 - Prof. Navarin, Università degli Studi di Padova
 - Collaborazioni Dr. Francesco Regazzoni:
Prof. Jakub Szefer, Northwestern University (Tom Slooff was hosted as part of the USI Doc.Mobility program)
- ♦ Gruppo Didyk
 - Meta (Adrián Jarabo)
 - Nvidia (Zan Gojcic)
 - University of Minnesota (Victoria Interrante)
 - University of North Carolina (Henry Fuchs)
- ♦ Gruppo Hormann
 - Real-time conformal mappings, with Craig Gotsman, New Jersey Institute of Technology, New Jersey, USA.
 - Bivariate range functions, with Chee Yap, New York University, New York, USA.
- ♦ Gruppo Multerer
 - Collaboration with Paul Schneider at USI in the faculty of economics on large-scale kernel methods.
 - Collaboration with Peter Balazs at Acustics Research Institute in Vienna on generalized samplets and frames.
 - Collaboration with Jürgen Dölz at University of Bonn on data-intrinsic approximation schemes.
- ♦ Gruppo Papadopoulou
 - Higher-order color Voronoi diagrams, with Sang Won Bae, Kyonggi University, Republic of Korea
 - Uncertainty in Proximity Structures, with Maarten Löffler, Utrecht University
 - Recognition and Realizability of Voronoi and Delaunay graphs, with Irene Parada, Rodrigo Silveira, Fabian Klute, Universitat Politècnica de Catalunya, Barcelona, Spain

- The Voronoi Diagram of Rotating Rays with Applications to Floodlight Illumination, with Carlos Seara, Universitat Politècnica de Catalunya, Barcelona, Spain

Conclude

- ◆ Gruppo Didyk
 - TU Braunschweig (Marcus Magnor)
- ◆ Gruppo Hormann
 - Curvature continuous corner cutting, with Claudio Mancinelli, University of Genova, Genova, Italy.
 - Consistent orientation of 3D point cloud normals, with Craig Gotsman, New Jersey Institute of Technology, New Jersey, USA.
 - Surface reconstruction from 3D point clouds, with Pierre Alliez, INRIA, Sophia-Antipolis, France.
- ◆ Gruppo Papadopoulos
 - The farthest color Voronoi diagram, with Rodrigo Silveira, Universitat Politècnica de Catalunya, Barcelona, Spain
 - Dimension ++, with Franz Aurehammer, Graz University of Technology, Austria

Conferenze e seminari

- ◆ Gruppo Alippi
 - Tutorial speaker at the Learning on Graphs Conference (LoG) Italy Meetup 2024, 4–6 December, Siena, Italy.
 - Tutorial speaker at the Learning on Graphs Conference (LoG) 2024, 26–29 November, virtual.
- ◆ Gruppo Didyk
 - invited talk during Locarno Future of Reality Conference
 - invited talk, TU Braunschweig
 - SIRA Brown Bag Talk
- ◆ Gruppo Multerer
 - Zurich Colloquium in Applied and Computational Mathematics, ETH Zurich (Switzerland), Title: “Data-intrinsic approximation in metric spaces”, 2025.
 - Colloquium Scientific Computing, University of Bayreuth (Germany), Title: “Samplets: Construction, properties and kernel matrix compression”, 2025.
 - Workshop 2534: Computation and Learning in High Dimensions, Mathematisches Forschungsinstitut Oberwolfach (Germany), Title: “Kernel interpolation on sparse grids”, 2025.
 - NUMLAB Seminar, Università degli Studi di Padova (Italy), Title: “Samplets and applications”, 2025.
 - DACO Seminar, ETH Zurich (Switzerland), Title: “Samplets: Construction and applications to scattered data”, 2024.

- University of Köln, Oberseminar Numerische Analysis, Köln (Germany), Title: “Samplets: Construction and scattered data compression”, 2024.
- University of Göttingen, Kolloquium über Angewandte Mathematik, Göttingen (Germany), Title: “Samplets: Construction and scattered data compression”, 2024.
- 22th Workshop Fast Boundary Element Methods and Space-Time Discretization Methods, Kleinwalsertal (Austria), Title: “p-multilevel Monte Carlo for acoustic scattering from large deviation rough random surfaces”, 2024.
- ◆ Gruppo Papadopolou
 - E. Papadopolou. Abstract Voronoi-like diagrams with applications. Shonan Meeting 234 - Path planning and Routing in geometric environments, Japan National Institute of Informatics (NII), Shonan Village Center, Japan, July 2025
 - Z. Wang. The topology of the Voronoi diagram of four lines. Dimension++ final Workshop, Kaestenburg (Ehrenhausen), Austria, July 2025

Keynote e relazioni invitate

- ◆ Gruppo Hormann
 - K. Hormann. Compressing geodesic Information for fast point-to-point geodesic distance queries. Hangzhou Dianzi University, Hangzhou, China, March 2025.
 - K. Hormann. Transfinite maximum likelihood coordinates. Hangzhou Dianzi University, Hangzhou, China, April 2025.
 - K. Hormann. Subdivision schemes for geometric modeling. San Bernardino Seminar in Computer Science, San Bernardino, Switzerland, April 2025.
- ◆ Gruppo Papadopolou
 - E. Papadopolou. Abstract Voronoi-like diagrams with applications. Shonan Meeting 234 - Path planning and Routing in geometric environments, Japan National Institute of Informatics (NII), Shonan Village Center, Japan, July 2025

Eventi

- ◆ Gruppo Crestani
 - Praveen Acharya, Charles L. A. Clarke, Fabio Crestani, Xiao Fu, Gareth J. F. Jones, Noriko Kando, Makoto P. Kato, Aldo Lipani, Yiqun Liu. 1st Workshop on User Modelling in Conversational Information Retrieval (UM-CIR 2024) co-located with the 2nd International ACM SIGIR Conference on Information Retrieval in the Asia Pacific (SIGIR-AP 2024), Tokyo, Japan, December 12, 2024.
- ◆ Gruppo Multerer
 - Miniworkshop Multiresolution Methods for Unstructured Data: Past, Present and Future October 1-2, 2025 at USI (<https://mud25.usi.ch>)

Appartenenze a comitati di programma di conferenze

- ◆ Cesare Alippi
 - TPC of SECRIPT (International Conference on Security and Cryptography), June 2025

- TPC of IEEE Conference on Communications and Network Security, September 2025
- Organizer of the Temporal Graph Learning workshop at the ACM SIGKDD Conference on Knowledge Discovery and Data Mining 2025, 3–7 August, Toronto, Canada.
- Organizer of the Foundation and Generative Models for Graphs special session at the European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning (ESANN) 2025, 23–25 April, Bruges, Belgium.
- Program Committee of the International Conference on Learning Representations 2025
- Program Committee of the International Conference on Machine Learning 2025
- Program Committee of the Annual Conference on Neural Information Processing Systems 2025
- Francesco Regazzoni
 - Co-Chair of the Program Committee of 21st Workshop on Fault Diagnosis and Tolerance in Cryptography (FDTC) 2024
 - Co-Chair of the Program Committee of the International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation (SAMOS) 2024
 - Co-Chair of the Program Committee of the International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation (SAMOS) 2025
 - Chair of the Track SYS2 “Design of Cyber-Physical Systems and IoT” at the Design Automation Conference (DAC) 2025
 - Co-Chair: “Security & Privacy track” at IEEE COINS 2025
 - Program Committee of DATE 2025
 - Program Committee of ISLPED 2025
 - Member of the Program Committee of CODES+ISSS 2025
- ◆ Piotr Didyk
 - Steering Committee Member of ACM Symposium on Computational Fabrication
 - Associate Editor of ACM Transactions on Graphics
 - Associate Editor of ACM Transactions on Applied Perception
 - Paper Co-Chair of Computational Visual Media Conference
 - International Program Committees of Eurographics 2024 (Full Papers)
 - International Program Committees of Eurographics 2025 (Full Papers)
 - International Program Committees of SIGGRAPH 2025 (Technical Papers)
- ◆ Kai Hormann
 - Computational Visual Media, Hong Kong, China, April 2025.
 - Geometric Modeling and Processing, St. Louis, USA, May 2025.
 - Symposium on Geometry Processing, Bilbao, Spain, June 2025.
 - Symposium on Symbolic and Algebraic Computation, Guanajuato, Mexico, July 2025.
- ◆ Evanthia Papadopoulou
 - Editorial Board, International Journal of Computational Geometry and Applications

Affiliazioni e riconoscimenti

- ♦ Cesare Alippi
 - Membro IEEE Task Force on AI for Time Series and Spatio-Temporal Data.
 - Membro IEEE Task Force on Learning for Graphs

- ♦ Kai Hormann
 - *John A. Gregory Award* for fundamental contributions to the field of geometric modelling, 2024.
 - Best Paper Award (with Q. Chang), Geometric Modeling and Processing, St. Louis, USA, May 2025.