

Preface

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Message from the DOLAP 2026 Chairs

The International Workshop On Design, Optimization, Languages and Analytical Processing of Big Data reached now its 28th edition. The research topics included but were not limited to:

- Design and Language
 - Data management fundamentals: architectures, design, ETL/ELT, reverse ETL, modeling, data integration, database design for big data, query processing, maintenance, evolution, security, personalization, and privacy in decision support systems.
 - Data Variety: unstructured data (e.g., text), semi-structured data (e.g., XML, JSON), multimedia, spatial, temporal, and spatio-temporal data, stream and sensor data, semantic web, data lakes, data spaces, data quality, graph data, multistore and polystore solutions, multi-model data warehouse
 - Explainable, trustworthy, and interpretable analytics: bias in big data and how to mitigate it; data quality and data cleaning; FAIRness (Findability, Accessibility, Interoperability and Reusability) in OLAP
- Optimization
 - Coping with Volume: physical organization, performance optimization and tuning, scalability, MapReduce and Spark for data analytics, performance optimization of ETL/ELT.
 - Coping with Velocity: Deployment on parallel machine, database clusters, cloud infrastructures and serverless architectures, active/real-time analytics, real-time queries.
- Analytical Processing and Applications
 - Analytics and Value: OLAP, data exploration through visualization, recommendation, reformulation, approximate query-answering, personalization, result presentation, data storytelling, graph analytics, process mining, advanced visualization for business contexts.
 - Analytics and Veracity: heterogeneous data integration for analytics, quality aspects of data analysis, exploration outcome and end-user experience, fairness of data analysis, analytics and data driven decision making for the data enthusiasts.
 - Analytics and ML: integration of analytics with machine learning, data mining, information retrieval, search engines, data science, predictive and prescriptive analytics.
 - Big Data applications: smart city, smart health, smart energy, smart grid, smart agriculture.

Submissions were accepted until December 23rd, 2025. The review process lasted until February 4th, 2026, when authors were notified about the results of the review process.

For DOLAP 2026 we received 26 submissions, all of which included full papers. Together with these papers, DOLAP included an invited session on: Sustainable Analytics.

DOLAP'26, 28th International Workshop on Design, Optimization, Languages and Analytical Processing of Big Data, March 24, 2026, Tampere, Finland

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In the review process, all submitted papers were assigned 3 to 4 reviewers. As a result of the process, 6 papers were accepted as full papers and 6 as short papers.

Moreover, DOLAP 2026 hosted one invited keynote by Prof. Rabl Tilmann on “A Look at the Ecological Impact of Big Data Systems”.

Further, this year, the DOLAP Program Chairs assigned the best paper award to Daniela Böhm, Georg Gottlob, Matthias Lanzinger, Davide Mario Longo, Cem Okulmus, Reinhard Pichler and Alexander Selzer for their paper “Selective Use of Yannakakis’ Algorithm for Consistent Performance Gains”.

The DOLAP 2026 Chairs would like to thank the Steering Committee and the Program Committee Members for their thorough and timely work.

March 2026

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Eleni Tzirita Zacharatou
Alejandro Maté

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