

Preface

Workshop on Quality of Knowledge Graphs (QKG 2026)

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The **Workshop on Quality of Knowledge Graphs (QKG 2026)** was held in conjunction with the **23rd European Semantic Web Conference (ESWC 2026)** in Dubrovnik, Croatia, on May 11, 2026. QKG 2026 focused on methods, standards, and tools for evaluating, improving, and sustaining the quality of Knowledge Graphs and Linked Data.

The workshop aimed to bring together researchers and practitioners working on topics including (but not limited to):

- FAIR data and Open Science practices
- FAIRness and bias detection
- Quality-aware data preparation, curation, and integration
- Knowledge Graph assessment and refinement
- Metadata quality, provenance, and traceability
- Multimodal data quality and AI-readiness metrics
- Explainability and diagnosis for data quality

A total of **15 submissions** were received. After peer review, **10 papers** were accepted for publication in these proceedings: **5 regular papers, 1 position paper, and 4 short papers.**

Accepted papers

- Towards Automated FAIR Compliance Diagnosis: Evaluating LLMs on Explanation and Diagnosis Questions. *Gabriele Tuozzo, Antonio Lieto*

This paper investigates how large language models can support automated diagnosis of FAIR compliance issues and provide human-understandable explanations. It directly addresses QKG goals on FAIRness assessment, explainability, and AI-supported quality workflows.

- Ranking-Guided Autoregressive Modeling for Multimodal Tabular Anomaly Detection. *Antonios Georgakopoulos, Paul Groth, Lise Stork*

The authors propose a method for anomaly detection in multimodal tabular data using ranking-guided autoregressive modeling. The contribution aligns with QKG's focus on data quality monitoring in heterogeneous knowledge ecosystems.

- Position paper: Issues in Logic-based Repairing of Knowledge Graphs. *Patrick Lambrix, Ying Li*
 This position paper discusses open challenges in logic-based approaches to repairing inconsistent or incomplete knowledge graphs. It is strongly related to QKG topics on quality refinement and constraint-based validation.
- A Benchmark for Gap and Overlap Analysis as a Test of KG Task Readiness. *Maruf Ahmed Mridul, Rohit Kapa, Oshani Seneviratne*
 The paper introduces a benchmark to evaluate how well a KG is prepared for downstream tasks by analyzing coverage gaps and overlaps. It contributes to QKG objectives on measurable quality dimensions and task-oriented KG evaluation.
- A two-layered Approach to Cope with Recursion in SHACL Repairs. *Robert David*
 This work proposes a two-layered strategy to manage recursion in SHACL repair settings, improving robustness of constraint handling. It supports QKG interests in validation technologies, semantic consistency, and operational quality control.
- An Explainable Header-Centric Framework for Large-Scale Semantic Table Interpretation and Data Quality Assessment. *Marcelo Valentim Silva, Hannes Herrmann, Valerie Maxville*
 The authors present an explainable framework for semantic table interpretation at scale, with explicit quality assessment mechanisms. The approach is relevant to QKG priorities on explainability, metadata quality, and scalable quality-aware data integration.
- Context Associations: an Application-Independent Annotation Method for RDF Knowledge Graphs. *Ruben Dedecker, Ben De Meester, Pieter Colpaert*
 This paper proposes a generic annotation method for RDF graphs based on context associations, independent of specific downstream applications. It contributes to QKG by improving representational quality, reuse, and interoperability of graph data.
- Measuring What Matters: User Perceptions of Knowledge Graph Quality Dimensions in Cultural Heritage *Maria Angela Pellegrino, Anisa Rula, Lisa Ehrlinger, András Micsik, Blerina Spahiu, Lorena Etcheverry*. The study analyzes how users perceive and prioritize KG quality dimensions in a cultural heritage scenario. It reflects QKG's emphasis on human-centric and domain-aware quality evaluation methodologies.
- Effects of Entailment in SHACL Validation of Closed Shapes. *Zenon Zacouris, Jin Ke, Mari-bel Acosta*
 This paper examines how entailment regimes affect SHACL validation outcomes in closed-shape settings. The results are directly relevant to QKG's interest in formal validation behavior and reliable quality assessment pipelines.
- A large-scale empirical analysis of FAIR compliance in biomedical KGs using KGHeartBeat and FAIR-Checker. *Sana Latif*
 The authors perform an empirical large-scale study of FAIR compliance in biomedical KGs using automated tooling. This contribution strongly matches QKG themes on FAIR metrics, reproducible quality assessment, and evidence-driven benchmarking.

Review process Each submission underwent peer review by members of the Program Committee. Each submission received at 3 reviews. The final decisions were discussed by the organizers based on reviewers' comments and overall fit with the workshop scope.

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