

14th International Joint Conference on Knowledge Graphs

15-17 October 2025 Heraklion, Crete, Greece

Venue: FORTH Main Building, Amphitheater

Detailed Program





Day 1 (15 October 2025)

8:45-9:15	Arrival and Registration					
9:15-9:30	Welcome from the General Chairs					
9:30-9:45	Welcome from	n the Director of FORTH-ICS, Panagiotis Tsakalides				
9:45-10:45	Keynote Speed	Keynote Speech Katja Hose, Sharp Edges in a Fuzzy World: Knowledge Graphs and LLMs				
10:45-11:15	Coffee Break					
11:15-12:55	P1 Session					
	11:15-11:40	11:15-11:40 Tapio Pitkäranta and Eero Hyvönen. Semantic Web – A Forgotten Wave of Artificial Intelligence?				
	11:40-12:05	11:40-12:05 Efstratios Skaperdas and Nick Bassiliades. Ontology-Aware Relation Prediction over EurostatKG: A Unified Neural Framework				
	12:05-12:30 Divya Baura and Diego Calvanese. User Access Control in Policy-Protected Virtual Knowledge Graphs					
	12:30-12:55 Jaime Osvaldo Salas, Paolo Pareti, Semih Yumusak, Soulmaz Gheisari. Luis-Daniel Ibáñez and George Konstantinidis, Evaluation and Comparison Semantics for ODRL					
12:55-13:00	Group photo at the entrance of the building					
13:00-14:00	Lunch Break					



14:00-15:40	P2 session				
	14:00-14:25	Zhongtian Sun, Anoushka Harit, Alexandra Cristea, Christl Donnelly of Pietro Liò. GLANCE: Graph Logic Attention Network with Cluster Enhancement for Heterophilous Graph Representation Learning			
	14:25-14:50	Rosario Napoli, Giovanni Lonia, Antonio Celesti, Massimo Villari and Maria Fazio. Bi-View Embedding Fusion: A Hybrid Learning Approach for Knowledge Graph's Nodes Classification Addressing Problems with Limited Data			
	14:50-15:15	Jiafeng Xiong and Rizos Sakellariou. Trajectory Encoding Temporal Graph Networks			
	15:15-15:40	Shu Zhao, Ying Zha, Ziwei Du, Huanjing Zhao, Xingsheng Lu, Ao Liu, Jie Chen and Zhen Duan. MugraTAG: Multi-granularity Representation Learning on Text-Attributed Graphs			
15:40-16:00	Coffee Break				
16:00-16:30	Invited Talk / graphs	Manolis Koubarakis. Question answering over geospatial knowledge			
16:30-18:00	Young Resea	rchers Forum			
	16:30-16:50	Jiaoyan Chen. Embedding Complex Knowledge: From Geometric to Language Models			
	16:50-17:10	Vasilis Efthymiou. Semantic Enrichment of Data Using Knowledge Graphs			
	17:10-17:30 (remote)	Ningyu Zhang. Knowledgeable Agents			
	17:30-18:00	Panel			
18:00	Close of Day	1			



Day 2 (16 October 2025)

09:30-10:00	Keynote Speech Kang Liu. Shuttle between Symbolic Knowledge and Neural Parameters				
10:30-11:00	Coffee Break				
11:00-13:05	P3 session				
	11:00-11:25	Julien Corman, Diego Calvanese, Ognjen Savkovic, Antonella Poggi, Maurizio Lenzerini, Lorenzo Marconi, Gianluca Cima and Roberto Maria Delfino. Answering MetaQueries over RDFS Ontologies under the Sparql Metamodeling Semantics Entailment Regime			
	11:25-11:50	Milos Jovanovik, Marija Vecovska, Maxime Jakubowski and Katja Hose. RDFGraphGen: An RDF Graph Generator based on SHACL Shapes			
	11:50-12:15	Ivan Gocev, Georgios Meditskos and Nick Bassiliades. Explaining Ontology Alignments via Abductive Graph Isomorphisms			
	12:15-12:40	Romuald Esdras Wandji and Diego Calvanese. Realizing Bidirectional Virtual Knowledge Graphs Using Ontop			
	12:40-13:05	Sophia Sideri, Iosif Oikonomakis, Petros Tsirmakos, Giorgos Flouris, Vasilis Efthymiou, Dimitrios Rompogiannakis, Elias Kyritsis, Ioanna Leonidaki and Andreas Zezas. HECATE at the Crossroads: Guiding Astrophysics into the Semantic Web			
13:05-14:00	Lunch Break				



14:00-15:40	P4 session						
	14:00-14:25	Zhiyu Pan, Yongli Mou, Fengshuo Hao, Yuting Gao, Stefan Decker and Antonello Monti. Semantic Annotation of Energy Data Using Ensemble Decision-Making with Large Language Models					
	14:25-14:50	Georgios Balanos, Evangelos Chasanis, Konstantinos Skianis and Evaggelia Pitoura. KGRAG-Ex: Explainable Retrieval-Augmented Generation with Knowledge Graph-based Perturbations					
	14:50-15:15	Zihao Song, Huang Peng. Weixin Zeng and Xiang Zhao. RANA: Conflict Resolution for Knowledge Graphs with Better Representation learning					
	15:15-15:40	Yannis Tzitzikas and Haridimos Quantum Computing: First Blo	•	owledge Graphs and			
15:40-16:00	Coffee Break						
		Parallel Session	S				
16:00-18:00	Education Tra	ack	Workshop Knowledge Graphs in Cultural Heritage (& CRM SIG). "Stelios Orphanoudakis" Meeting Room				
	16:00-16:20	Constance Jumbo, Rashed Al Amin, Hasan Abu Rasheed, Veit Wiese, Christian Weber and Roman Obermaisser. A Knowledge Graph-Based Approach for Personalized Course and Curriculum Path Recommendation	16:00-17:00	Tutorial Yannis Marketakis. Building Interoperable Knowledge Graphs with X3ML Framework			
	16:20-16:35	(short) Amir Rajabi, Jan Schnieder and Daniel Schiffner. Conceptual Design Considerations of a Knowledge Graph—Driven Framework for Scientific Knowledge Exploration	17:00-17:15	Nicolò Pratelli, Emanuele Lenzi and Valentina Bartalesi. Connecting Cultural Heritage Through Knowledge Graphs: A Case Study on Medieval Manuscripts			
	16:35-16:50	(short) T.Y. Emmy Lai, Ann- Kathrin Bernards, Dena Baghery, Marlena Flüh, Tobias Lang. Héctor Allende-Cid and Diego Collarana. ABEL:	17:15-17:30	Alexandros Makris, Ioanna Demeridou, Panagiotis Koutlemanis, Anastasios Roussos, Nikolaos Partarakis and Xenophon Zabulis.			



		Artificial Buddy for Effective Learning.		A Knowledge Graph- Driven Interactive 3D Simulation for Craft Training.
	16:50-17:00 (remote)	Qurat Ul Ain, Mohamed Amine Chatti, Jean Qussa, Amr Shakhshir, Rawaa Alatrash and Shoeb Joarder. An Optimized Pipeline for Automatic Educational Knowledge Graph Construction	17:30-17:45	Gerald Hiebel and Brigit Danthine. A Knowledge Graph for Archaeological Research based onCIDOC CRM with latest extensions implemented with RDFstar and Named Graphs.
	17:00-17:10 (remote)	Rawaa Alatrash, Mohamed Amine Chatti, Nasha Wibowo and Qurat Ul Ain. Inferring. Prerequisite Knowledge Concepts in Educational Knowledge Graphs: A Multi- criteria Approach.	17:45-18:00	Georgia Angelaki. Knowledge Representation of Intangible Cultural Heritage according to the UNESCO 2003 Convention definition.
	Evaluation Tr	rack		
	17:10-17:20	Jeff Pan. Archer: Bilingual Reasoning-aware Text-to- SQL Evaluation		
	17:20-18:00	Marianne Menglin Liu, Sai Ashish Somayajula, Syed Fahad Allam Shah and Dan Roth. OraPlan-SQL: A Planning-Centric Framework for Complex Bilingual NL2SQL Reasoning		
18:00	Close of Day	2		
20:00	Social Dinner			



Day 3 (17 October 2025)

09:15-10:30	P5 session (In Use 1/2)				
	9:15-9:40	Dessislava Petrova-Antonova, Paolo Pareti, Petar Tomov, Semih Yumusak, Christopher Maidens, Shanshan Jiang, George Konstantinidis and Dumitru Roman. Knowledge Graph-Driven Policy Enforcement in Urban Dataspace			
	9:40-10:05	Michalis Mountantonakis, Dimitris Papadopoulos and Yannis Tzitzikas. Basketball Question Answering using Knowledge Graphs and Large Language Models			
	10:05-10:30	Sophia Sideri, Emmanouil Patronakis, Evangelos Nikiforos, Isidoros Chatzichrysos, Apostolos Baniotis, Valantis Zervos, Stavros Tzormpatzakis, Michalis Saridakis, Iosif Oikonomakis, Michalis Mountantonakis, Pavlos Fafalios and Yannis Tzitzikas. To Automate or not to Automate the Transcription of Ancient Earthquakes: Toward a Global Knowledge Graph about Ancient Earthquakes			
10:30-11:00	Coffee Break				
11:00-11:50	P6 session (In Use 2/2)				
	11:00-11:25	Sophia Sideri, Vasilis Efthymiou, Dimitris Plexousakis and Haridimos Kondylakis. PG2RDF: Schema-Guided Transformation of Property Graphs to RDF			
	11:25-11:50	Yannis Marketakis, Yannis Tzitzikas, AlessandroPetrocelli, Sara Pittonet Gaiarin, Siân Astley, Christine Absil, Michelle Boonstra, Tim Huntington, Tracy Murai and Nicolas Baily. Construction, Access, and Application of a Knowledge Base for Sustainable Aquafood Communication			
11:50-13:05	Industrial Fo	rum (talks)			
13:05-14:00	Lunch Break				



14:00-15:10	Demo Papers and Posters				
	14:00-14:10	Michalis Mountantonakis and Yannis Tzitzikas. TCRMQ: Question Answering by Multi-Hop SPARQL Queries over Event-Based Knowledge Graphs			
	14:10-14:20	Bartal	•	eospatial Knov	Emanuele Lenzi and Valentina wledge Graphs for Cultural
	14:20-14:30	Birte Caesar, Solveig Peter, Celsa Diaz Tejada, Matthias Werner, Os Krafft and Michél Mahler. Process Copilot for the German Public Sector			
	14:30-14:40	Knowledge Retrieval for Agentic Systems in the Cloud: Learning, Analysis and Control Giannis Vassiliou, Georgia Eirini Trouli, Nikolaos Papadakis and Haridimos Kondylakis. 3T: Triple Stores Triggers Gabriel Dumont, John Puentes and Pedro Merino-Laso. Unsupervised Linking of Unstructured Data Entities to a Knowledge Graph			
	14:40-14:50				
	14:50-15:00				
	15:00-15:10				
15:10-15:30	Coffee Break	& Free	Discussion at	the Posters	
			Parallel S	Sessions	
16:00-17:00	Tutorial Paolo Pareti. The Shape Constraint Language (SHACL an Overview and its Future Directions		15:30-17:00	Knowledge N	uantum Computing and Data / Management (QC&DKM) Payatakes" Meeting Room
				15:30-16:30	Tutorial George Stamatiou. Introduction to Quantum Computing



			16:30-16:45 (remote)	Invited Talk Dimitris Angelakis. Analog and qubit efficient quantum computing
			16:45-17:00	Paper Giorgos Theodorakis, Michalis Touloupakis and Yannis Tzitzikas. On Encoding Big Knowledge Graphs as Quantum States and on Running Grover's algorithm
17:00-18:00 (remote)	Keynote Speech Pas	cal Hitzler. Knc	owledge Graph	s in the Neurosymbolic AI Age
18:00-18:15	Close of Day 3			

