

Lecture 6 – Intelligent Applications with Knowledge Graphs and Deep Learning 6.0 Lecture Overview

Prof. Dr. Harald Sack, Mary Ann Tan & Mahsa Vafaie
FIZ Karlsruhe – Leibniz Institute for Information Infrastructure
AIFB – Karlsruhe Institute of Technology
Autumn 2023



Leibniz-Institut für Informationsinfrastruktur

## **Knowledge Graphs**



Lecture 6: Intelligent Applications with Knowledge Graphs and Deep Learning

- 6.1 The Graph in Knowledge Graphs
  - Excursion 8: Distributional Semantics and Language Models
- 6.2 Knowledge Graph Embeddings
- 6.3 Knowledge Graph Completion
- 6.4 Knowledge Graphs and Language Models
- 6.5 Semantic Search
- 6.6 Exploratory Search and Recommender Systems

## **Knowledge Graphs**

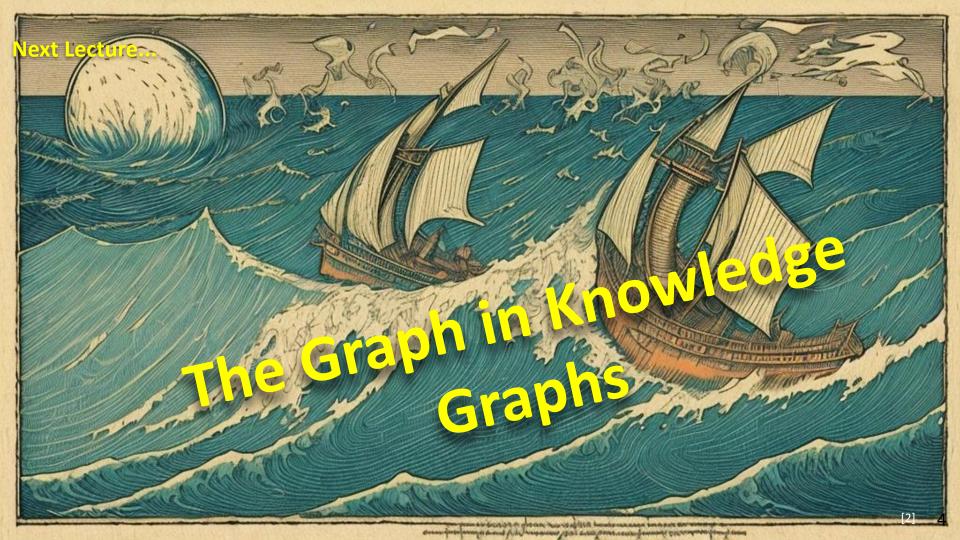


Lecture 6: Intelligent Applications with Knowledge Graphs and Deep Learning

## **Additional Hands-On:**

- 6.1 Network Analysis
- 6.2 Introduction to Knowledge Graph Completion using TransE

[1



## **Knowledge Graphs**

6. Intelligent Applications with Knowledge Graphs and Deep Learning



