# **Knowledge Discovery Interest Group**

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#### KD-IG

"Knowledge Discovery is the task of processing and analyzing astronomical datasets with the aim of extracting new knowledge. This endeavor spans multiple disciplines including visualization, data access and exploration, machine learning, statistical methods and workflow orchestration."\*

# The KDIG roadmap

## ML-proofing existing and future science platforms

- Are existing astronomy science platforms compatible with ML methods?
- Investigate whether science platforms can access tabular and non-tabular data through VO interfaces.
- Building libraries of well-established pre-trained models and integrating them in science platforms.
- Collect user requirements for science platforms to support ML methods and see how it fits into the plan of science platform from the developers' and relevant service providers' side.

## Al and Large Language Models in the VO

- Coordinating an IVOA, inter-WG/IG groups team to scope the current and future potential impact of AI on VO.
- Collecting use cases and requirements for the integration of commercial and/or ad hoc LLMs models in IVOA-relevant topics.
- Investigating best practices to integrate LLMs with VO tools for a fusion of domain knowledge and data.

# KD-IG @ 2023 Fall InterOperability Meeting

### No KD-IG session

#### **KD-relevant sessions**

- GWS session (today 4PM Tucson time)
- TDIG session (tomorrow 4PM Tucson time)
- Apps sessions I (tomorrow 2 PM Tucson time) and II (Sun day 9 AM Tucson time)

How to reach us:

email: kdd@ivoa.net webpage: KDIG IVOA Wiki Slack: #kdd