

Knowledge Discovery Interest Group

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Vice-Chair: André Schaaff (CDS)

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Session Recap

Joint session with DCP on Saturday November 15 @ 14:00-15:30

- Trustworthy AI (and the Eu Al Act) Gilles Landais
 - the European AI Act in force since Aug 2025 requires AI providers in Europe to comply with transparency and copyright rules.
- Software Heritage, project presentation and applications to AI Thomas Aynaud
 - Software Heritage archives software source code with over 26B source files to track code provenance, licences, and dependencies.
 - CodeCommons aims at creates transparent traceable code datasets for AI training
- First feedback on implementing MCP server to access CDS services Thomas Boch
 - Demonstrate experimental MCP servers with CDS services.
 - Key considerations include precise tool descriptions, results inconsistency and cost.
- Make astronomical data AI-ready across surveys: Lessons-learned from the Multimodal Universe Project - François Lanusse
 - Multimodal Universe project assembles 100TB+ standardized cross-matched data from major surveys (DESI, HSC, SDSS, Gaia) with fixed schemas (flux, ivar, wavelength, time, psf_fwhm) stored in HEALPix-organized HDF5 files.
 - Multimodal cross-matching and versioning is challenging.

Thanks to all the speakers and participants!

Discussion

Making AI from FAIR data & making FAIR AI

Despite limited time for discussion, we successfully covered some key aspects

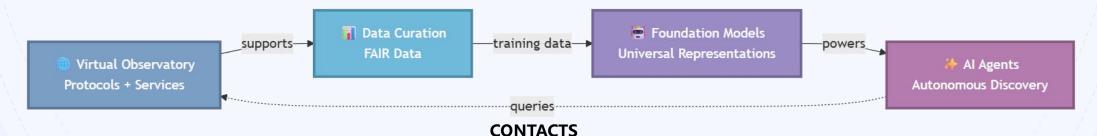
- How to provide FAIR data for AI?
- How can VO protocols and servicess be applied and integrated with agent workflows?

Given the Emerging paradigms in AI for Astronomy:

Foundation Models - Universal Representations

Al Agents - From Workflow Ochestration to Autonomous Discovery

VO is an essential infrastructure connecting AI and astronomical data



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