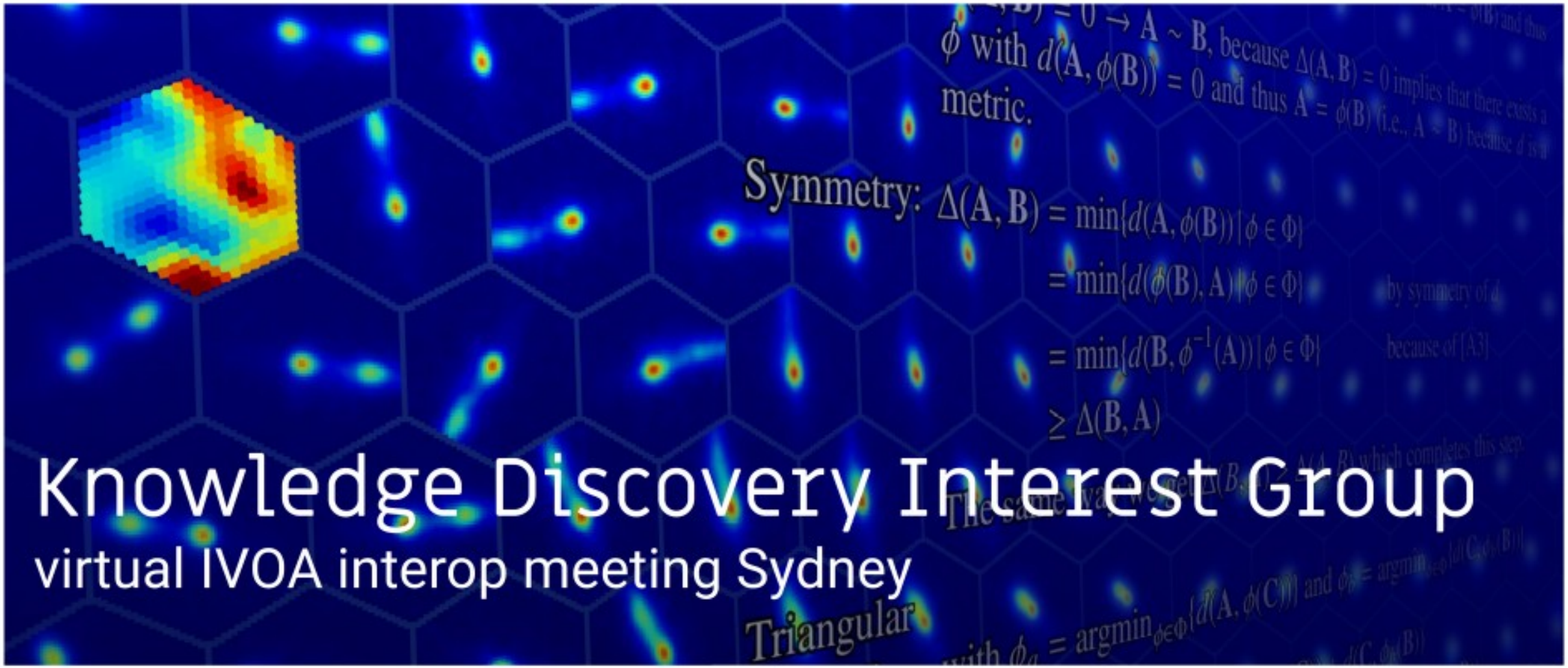
HITS
Heidelberger Institut für
Theoretische Studien

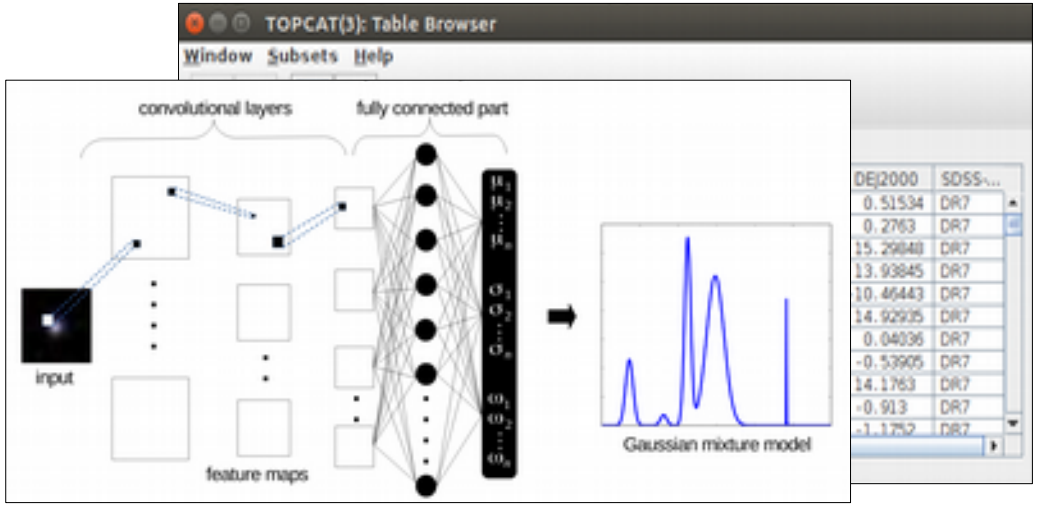


Knowledge Discovery Interest Group

virtual IVOA interop meeting Sydney

KDIG / ongoing work

Database storage for ML
- store uncertainties
- queries with uncertainty
- reproducibility / training & validation data
- provenance



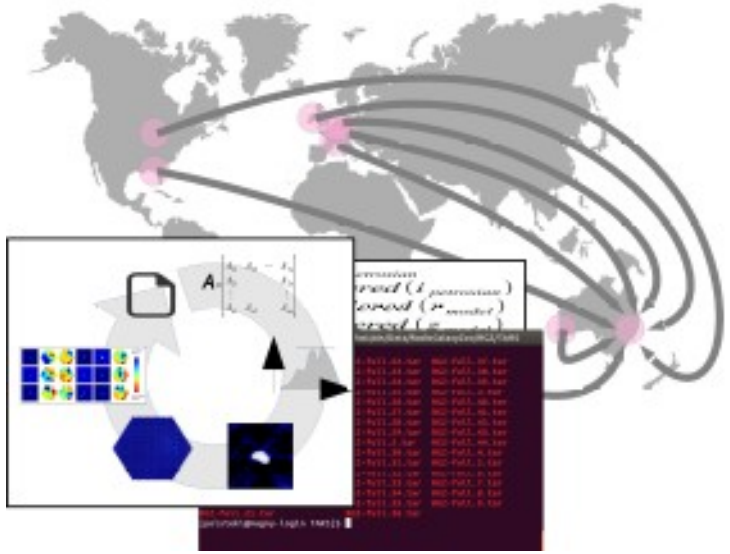
Explorative access
- developing prototypes
- defining requirements
- annotation: semantics/DM

- see video by Antonio D'Isanto
  https://youtu.be/ztxUnFcPJkQ

KDIG / ongoing work

Bringing code to the data

- how to find resources
- how to package code
- how to register functionalities
- how to orchestrate workflows across different centers



Accessing the VO for ML tasks, polymorphic access

- HiPS is perfect to get data as required by many deep learning applications
  → hipspy (Tomas Boch)
  + very cool SIA HipsToFits prototype (François Bonnarel)
- Experiment using Pan-STARRS data

KDIG Related Sessions

Discussion: is the VO a digital plate archive or an observatory?

- machine learning analysis is building telescopes for a virtual sky
- tables are great but how to do data-science on images, spectra, cubes, time-series? (Single Source Science)
- are science platforms a solution? how do we standardize those
  GWS → Session on science platforms on Tuesday 20:30 UTC

KDIG Sessions

- Possible small KDIG session next week. Will be announced on KDIG wiki.