





## **ESCAPE**

European Science Cluster of Astronomy & Particle physics ESFRI research Infrastructures

## Science Platforms & Interoperability

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@ Science Platorms: towards Data Science -



BoF 8

Groningen, 9 October 2019





## **Disclaimers**

- Some content may be DAL biased or resource curation based
  - a lot of our work is data/resource driven
- We are <u>NOT</u> the IVOA
  - We were asked to give a VO/interoperbaility view

ADASS XXIX BoF8, Groningen 9 October 2019

- We have a lot of QUESTIONS in here
  - We don't know the solutions yet











## Interoperability among Platforms

#### **GOALS**

- enable direct re-use of data/service/code/workflow resources among standalone platforms
- continue working on the ecosystem idea sitting behind the IVOA vision

"ecosystem is better than monoculture"











## **VO within Science Platforms**

#### **PROS**

- not reinvent the wheel
- interoperable data/service resources
- metadata richness to enable science portal operations
- long term sustainability of the effort to build a Science Platform

#### **CONS**

- implementation may take more effort
- cost of contributing to a standards community











## Interoperability among Platforms

#### **HURDLES**

- interoperable <u>data</u> resources
- interoperable <u>code</u> resources
- moving them around in a realistic and reasonable way









## Interoperability among Platforms

#### **STATUS & NEEDS**

- data discovery and access, open VO standards
- interoperable AAI solutions (IVOA GWS working on it ... )
- metadata to characterize network proximity
- IVOA metadata EXIST for describing data, NEED to have them for code
  - there probably already are some standards for this
  - we should find/evaluate and adopt them rather than invent new ones





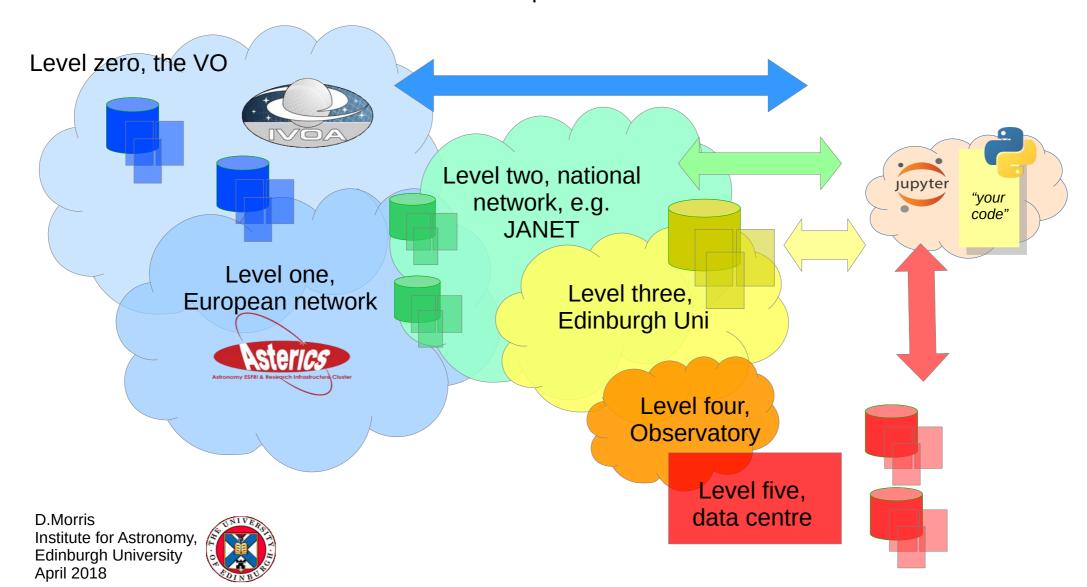








## Can we model this as membership of 'zones'?





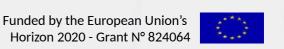
### **ESCAPE** A word on FAIRness

Findable, Accessible, Interoperable & Re-usable return of Science Platforms is potentially great, but Science Platforms need to be designed properly to allow it (don't stay closed in your own realm).

See reproducibility talk: Bertocco @ IVOA Interop DCP session (Friday @ 15:30 - Student Hotel splinter room)









# Thank you!





