ESCAPE

OSCARS
Open Science Clusters' Action for Research & Society

Funded Project

STARLIGHT

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Implemented by

CTAO ACADA COLLABORATION

Phœnix

LAPP
Laboratoire d'Annecy-le-Vieux de Physique des Particules

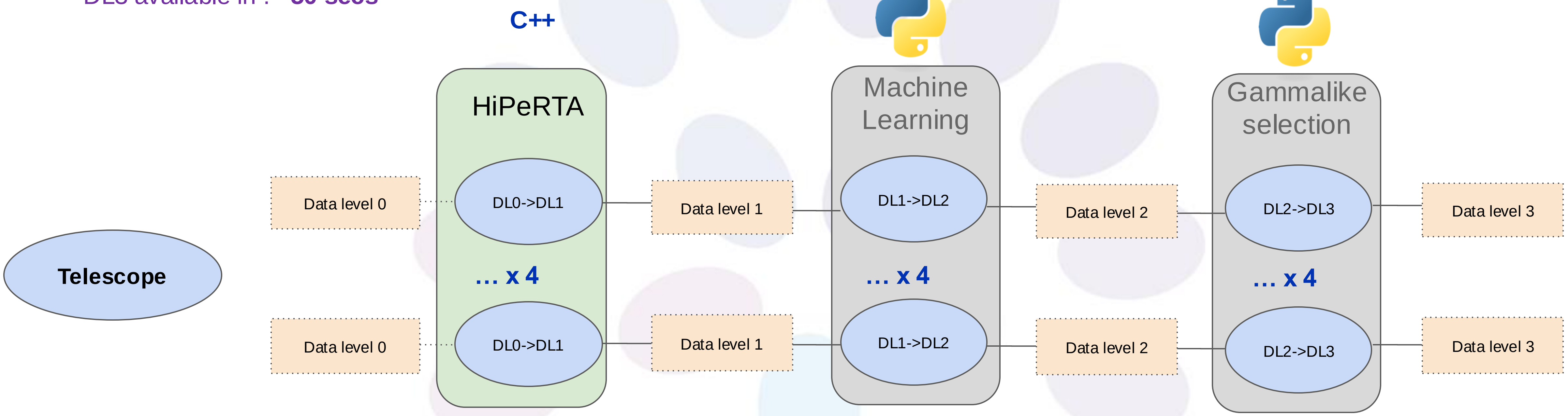
hipeRTA

Funded by the European Union

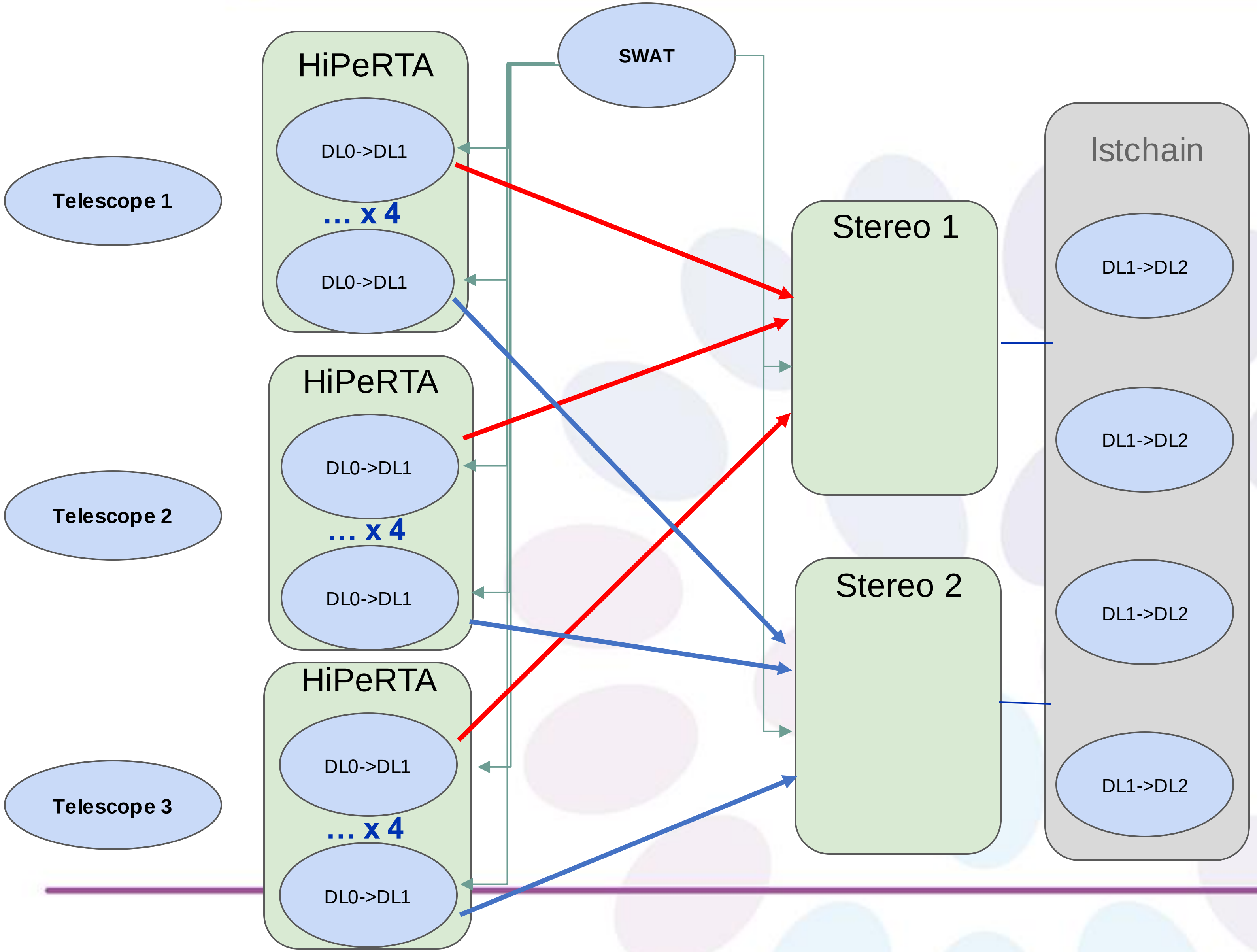
CHALLENGE ADDRESSED

Current performances with the LST-1 :

- Input data : ~**3 GB/s**
- Output data : **~20 kB/s**
- Current speed : **~0.75 GB/s/CPU**
- DL3 available in : **~50 secs**



SOLUTION



What we already have :

- Modular backend for every types of sockets
- Test coverage around 90%
- Mock testing to speed up the test procedure
- Monoscopic analysis of data

What we are going to do :

- Test several socket backends and choose one for global architecture
- Add performance tests for several backends to keep the current coverage
- Develop stereoscopic functionality

RESULTS

OSCARS

What will be the results and how do you plan to make them available to the broader community?

- The HiPeRTA project is already open-source and available on Gitlab and will continue to be open-source during all the development.
- The software is already provided on the ESCAPE Open-source Software and Service Repository.

HipeRTA

RISKS

What risks could limit the success of the project, and how can they be mitigated

The main issue is related to the pressure this architecture places on the network.
Reflexion axes are :

- Define the data that we need to send for stereoscopic analysis.
- Design a resilient architecture so the system could handle network errors and continue to work properly.