LAPP
Laboratoire d'Annecy de Physique des Particules

RTA-SAG :
Real Time Analysis for LST/CTA

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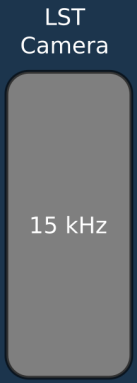
ESCAPE
cta cherenkov telescope array
cnrs
UNIVERSITÉ SAVOIE MONT BLANC

Real Time Analysis pipeline



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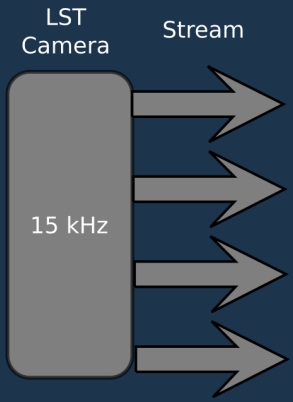

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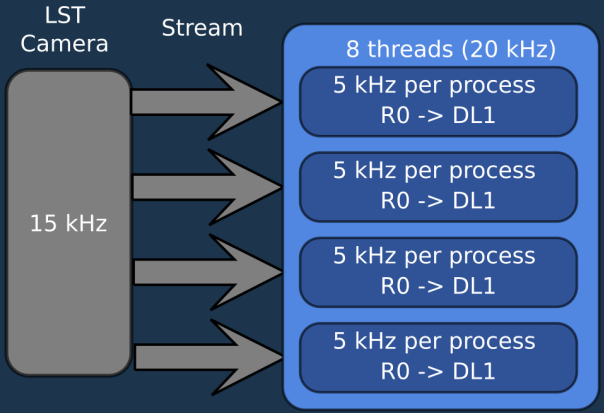

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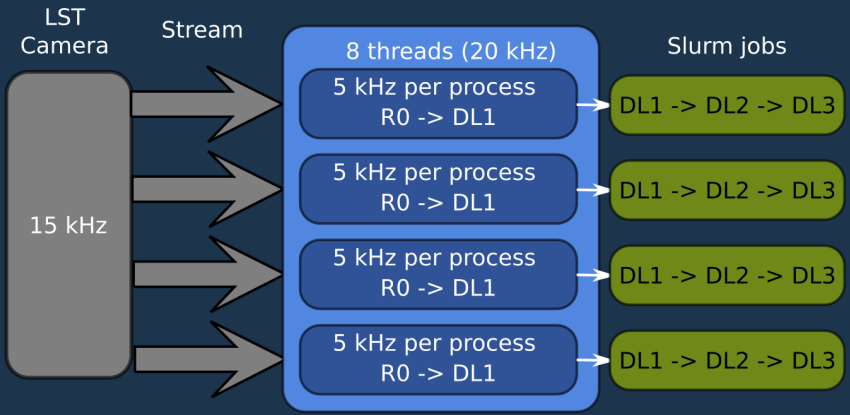

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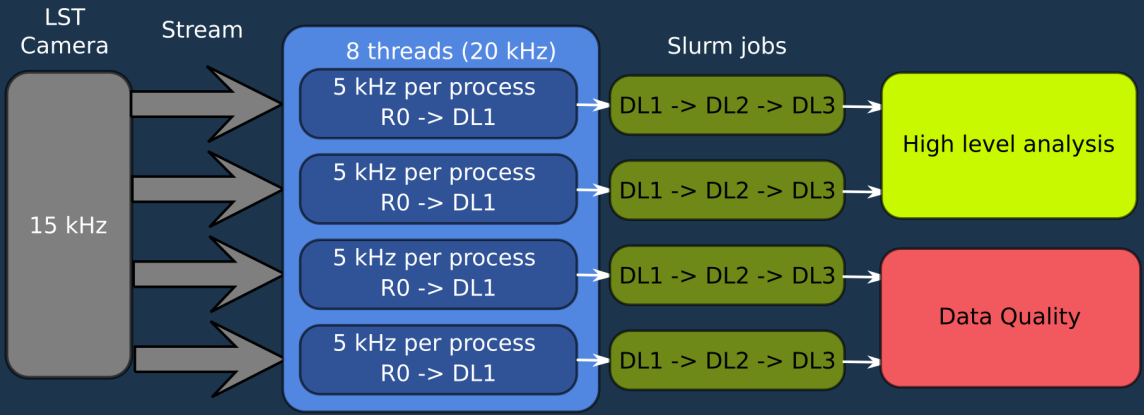

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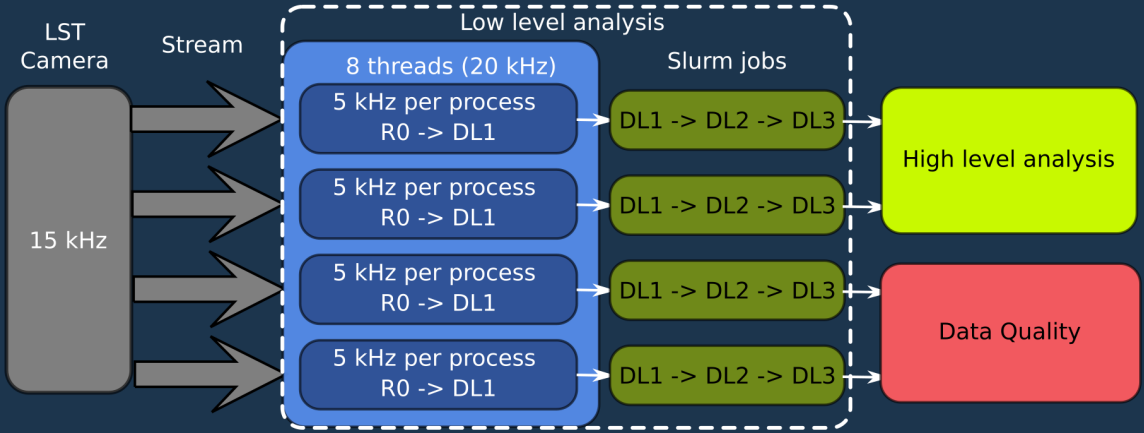

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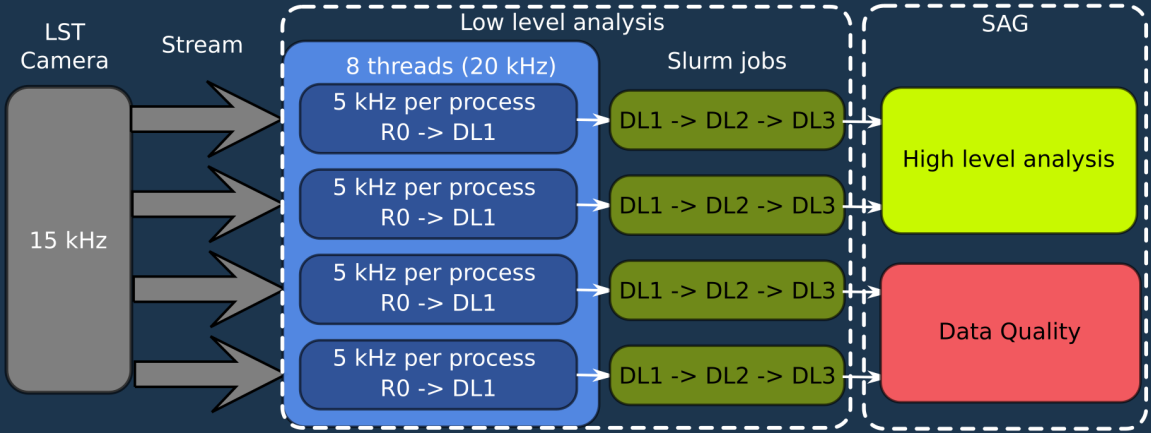

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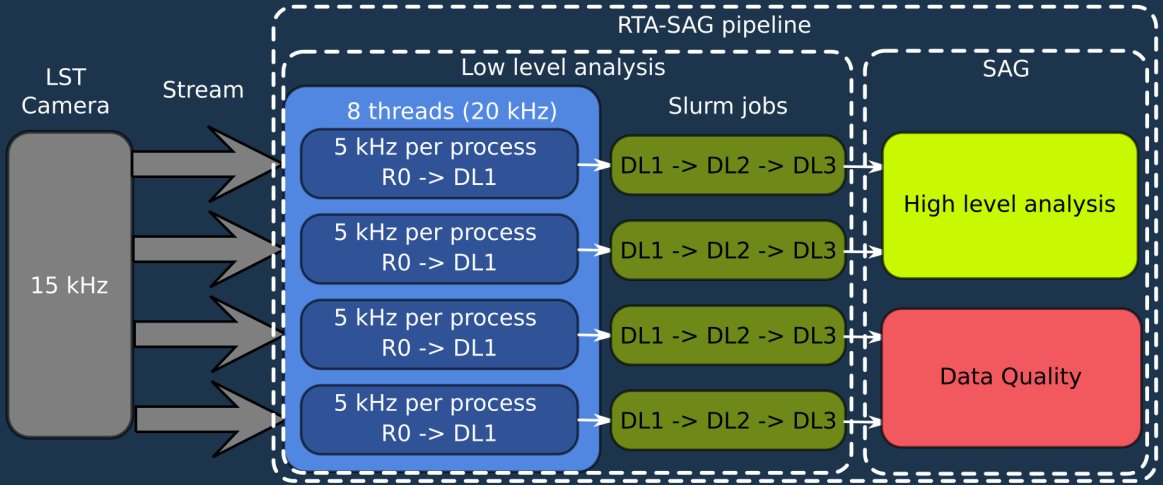

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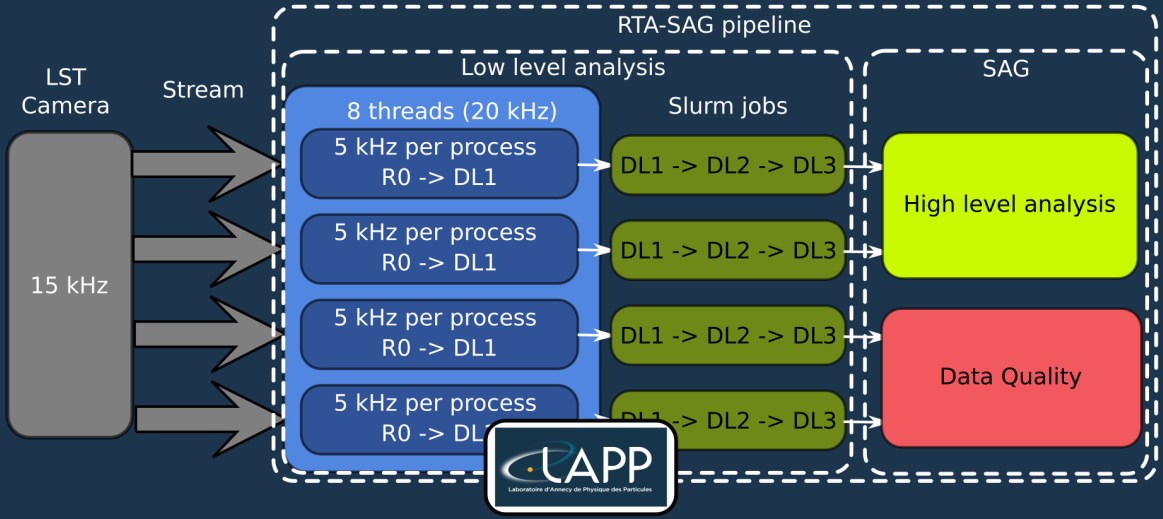

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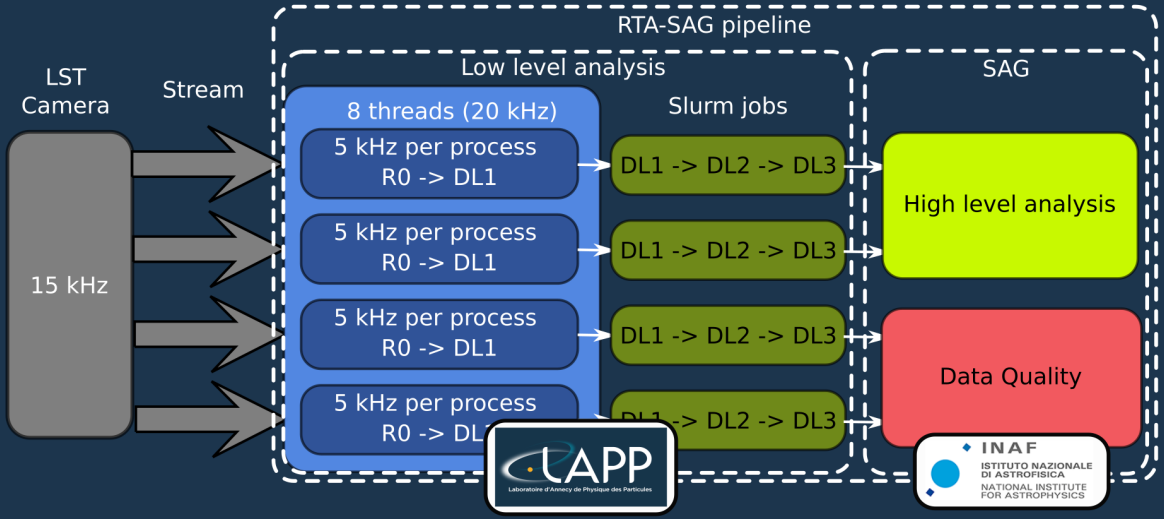

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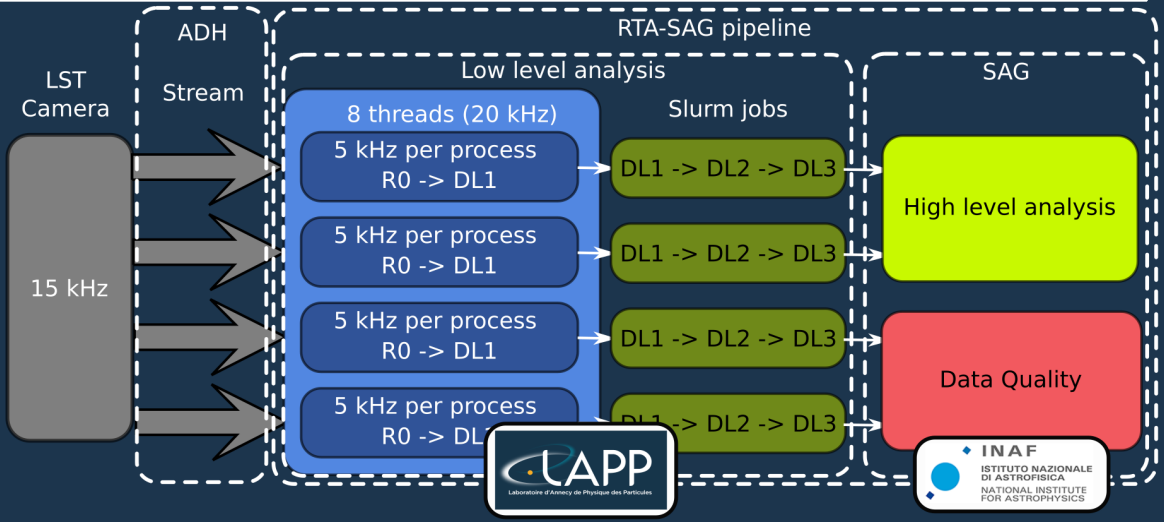

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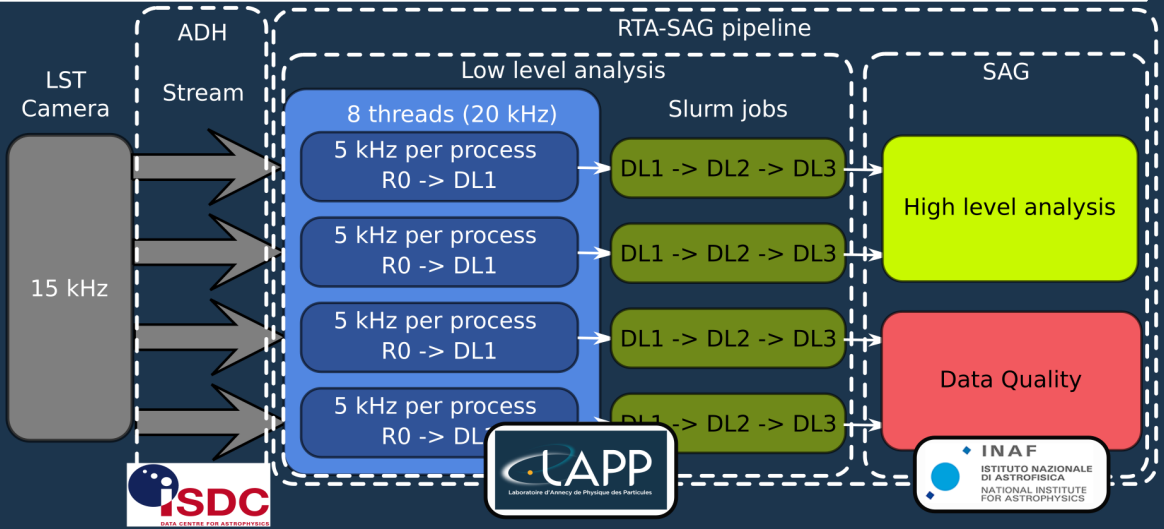

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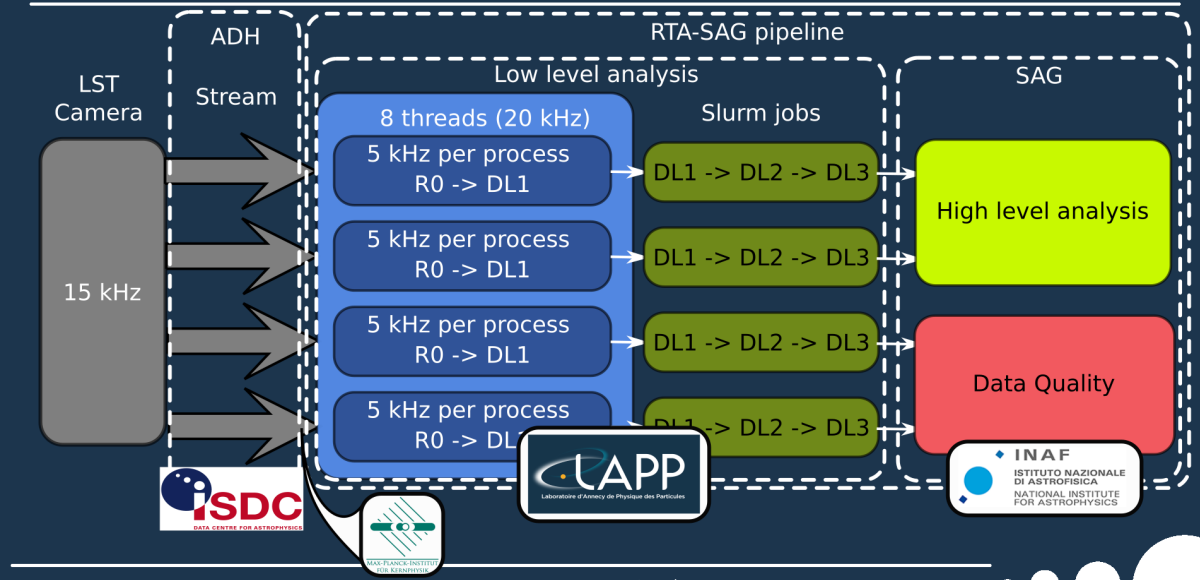

RTA Team

Current team :

- Pierre Aubert : Permament research engineer (internship) since 1st december
- Enrique Garcia : Computer engineer CDD (since July 2019)
- Thomas Vuillaume : Permament research engineer (internship) since 1st december
- Gilles Maurin : Teacher researcher in physic

Leave the team :

- Jean Jacquemier : Permament computer engineer (up to end of february 2020)

Join the team :

- Sami Caroff : Permament physic researcher (from 1 january 2021)

Difficulties

Manpower (keep development efficiency) :

- Follow developments in others softwares to adapt HiPeRTA :
  - ctapipe
  - lstchain
  - CameraToACTL (adapt RTA analysis to new R0 stream)
- Update/add/optimize/maintain in RTA candidates algorithms from CTA collaboration
- Compensate for lack of reactivity in other softwares :
  - Data format alignement (HDF5)
  - Incompatible analysis version (lstchain/ctapipe)
- Wait for new features :
  - lstchain (DL2 to DL3)
- Undefined data model (ie DL0 as data stream)
- Keep HPC analysis efficient even with ACS

Perspectives

- Real Time Analysis new performances test :
  - On dedicated computers
  - With dedicated queue
- Use Real Time Analysis on real data stream

- Milestones mini-ACADA :
  - version 1 : end 2020 (still waiting for DL0 data format)
  - Deployment on LST early 2021