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# ITS Rawdata in AliRoot: general

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# RawStream classes

- SPD: `AliITSRawStreamSPD`

- Working for simulation and used to read rawdata from real data (Integrated Beam Test, Nov. 2004) (talk from D. Elia)

- SDD:

- `AliITSRawStreamSDD` (simulated data)
- `AliITSRawStreamSDDv1` (beam test data August 2004)
- `AliITSRawStreamSDDv2` (Int. Beam Test, Nov. 2004)

(see next slides)

- SSD:

- `AliITSRawStreamSSD` (simulated data)
- `AliITSRawStreamSSDv1` (Int. Beam Test, Nov. 2004)

(talk from E. Fragiaco)

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# Conversion Raw to Digits

- Classes for integrated beam test (BT geometry):
    - `AliITSBeamTestDigitizer` (TTask to perform digitization in ITS)
    - `AliITSBeamTestDigSPD` (raw2digits for pixel)
    - `AliITSBeamTestDigSDD` (raw2digits for drift)
    - `AliITSBeamTestDigSSD` (raw2digits for strip)
  - Raw2(S)Digits for event merging:
    - Implemented in AliITS by A. Morsch
  - Raw2Digits conversion could be easily implemented also in `AliITSDetTypeRec` (ITS reconstruction class) for real data
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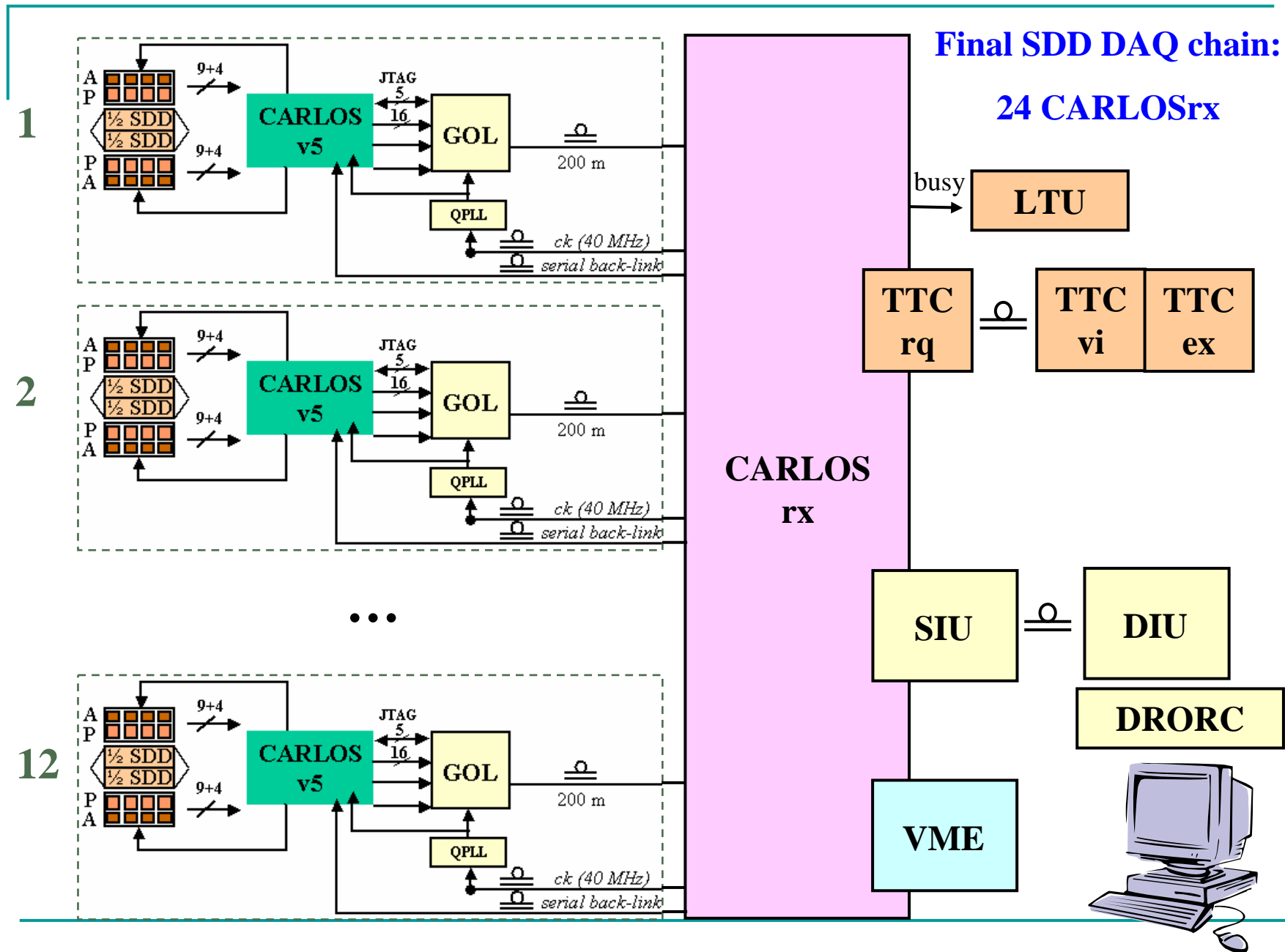
# Cluster finders

- AliITSClusterFinderV2(default one, used for tracking): allows the reconstruction starting directly from rawdata
    - It uses the classes AliITSRawStreamSPD, AliITSRawStreamSDD, AliITSRawStreamSSD, developed for simulated data
  - AliITSClusterFinder: it doesn't access rawdata (only digits), but access to rawdata can be easily added
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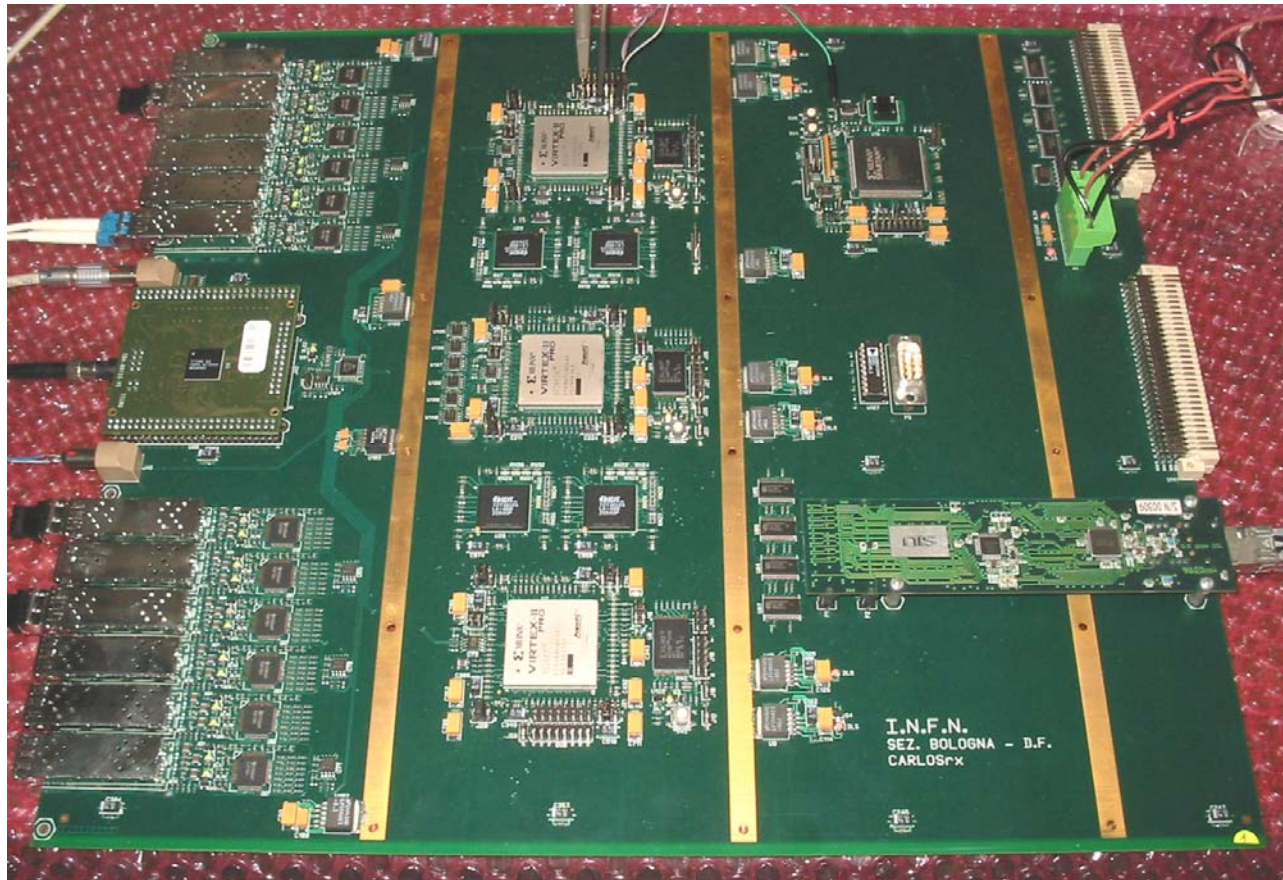
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# SDD Rawdata and RawStream classes

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# CARLOSrx data concentrator card



- 9U x 400 mm VME board

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# Status of SDD rawdata

- Still working on the final rawdata format
    - The final version of CARLOSrx reads out 12 modules
    - Total numbers (260 SDD): 24 CARLOSrx, 24 DDL
  - Rawdata from each CARLOSrx contain data coming from 12 modules
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# Status of SDD RawStream classes

- **AliITSRawStream (simulation)**
    - working with DDL mapping
    - Not suitable to final rawdata format
  - **AliITSRawStreamSDDv2(integrated beam test)**
    - In the beam test a previous prototype of CARLOSrx was used, reading out only one module (and not 12), but individual format for one module very close to the final one
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