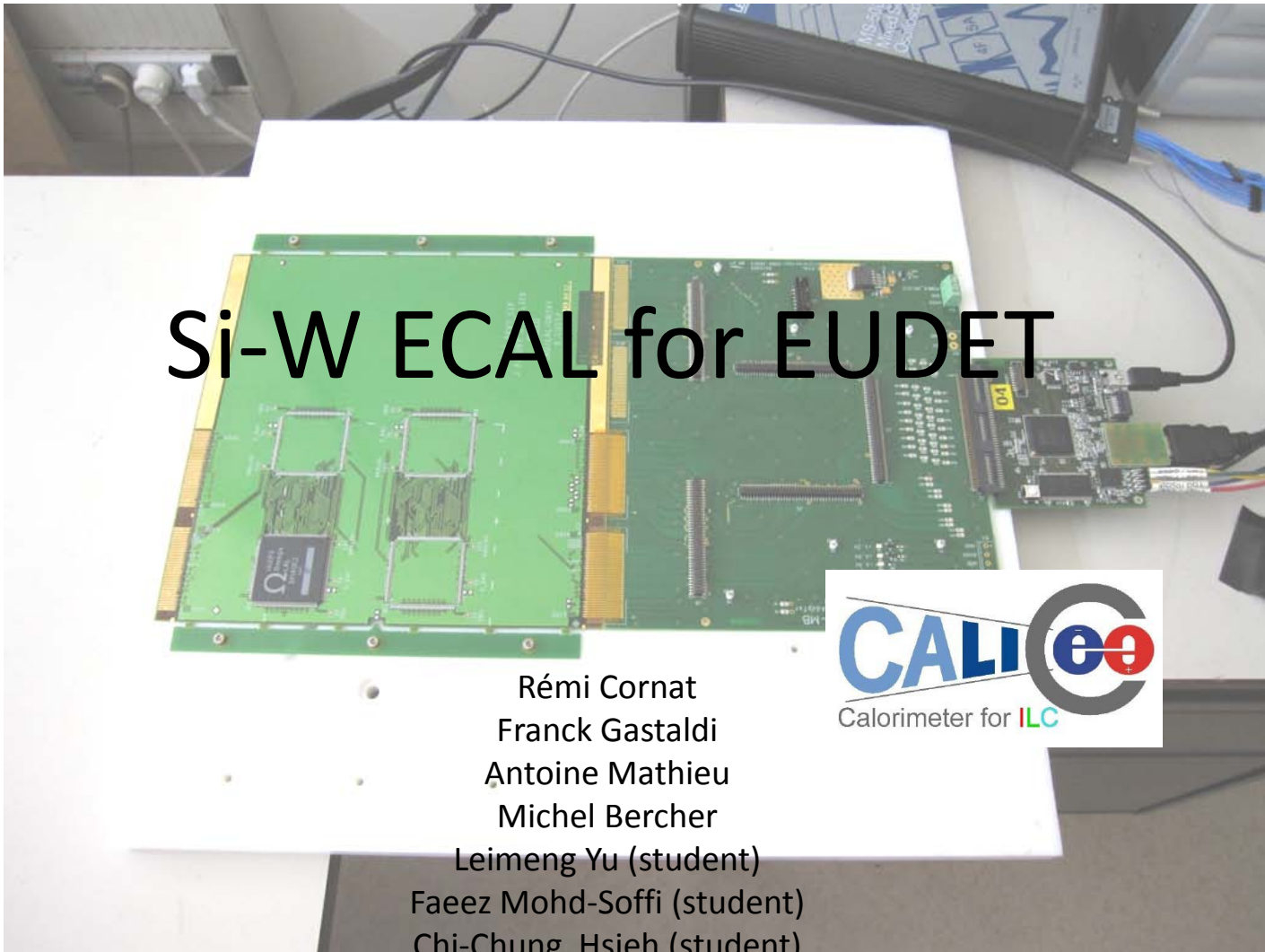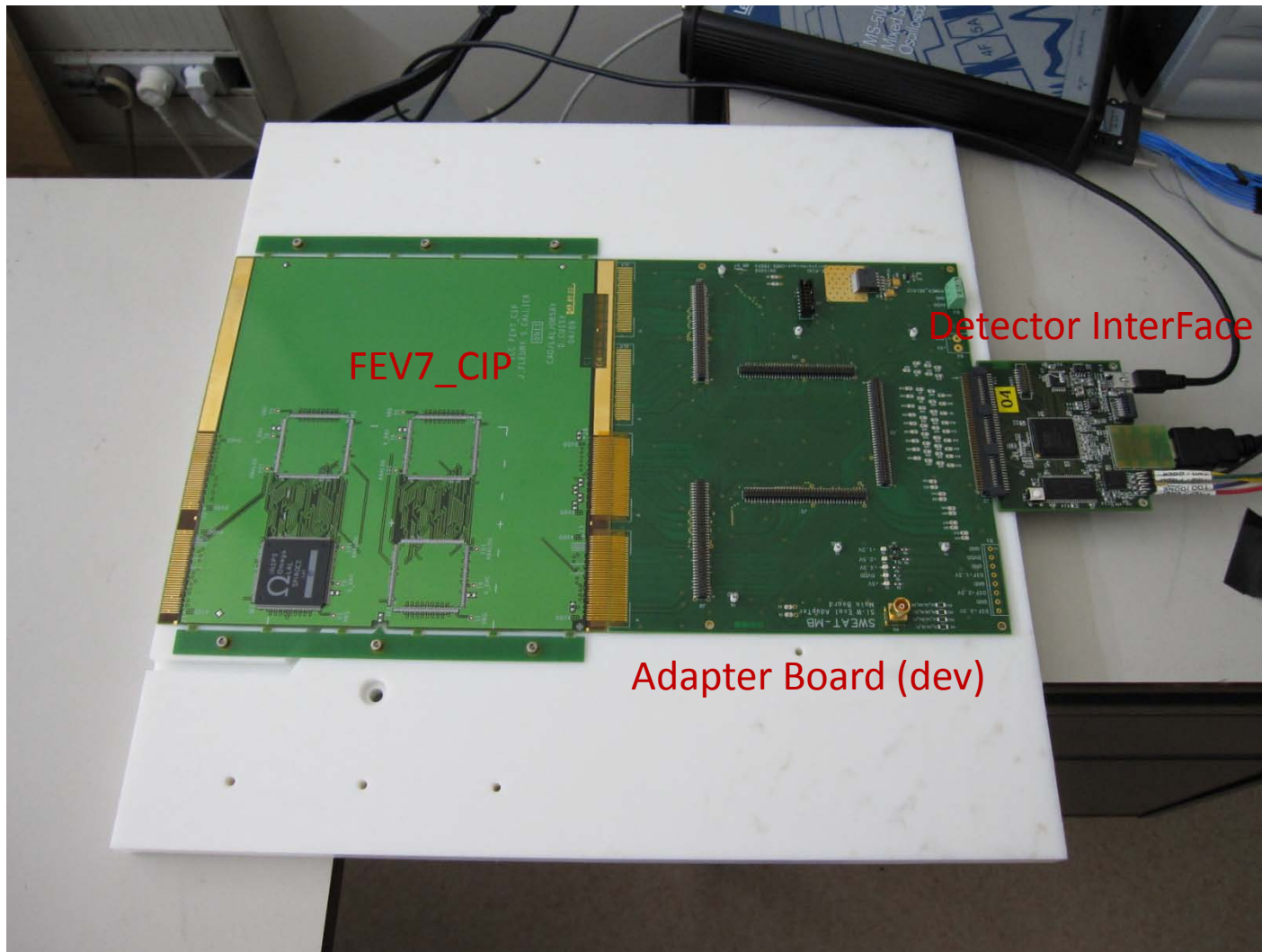# Si-W ECAL for EUDET

Rémi Cornat
Franck Gastaldi
Antoine Mathieu
Michel Bercher
Leimeng Yu (student)
Faeez Mohd-Soffi (student)
Chi-Chung Hsieh (student)
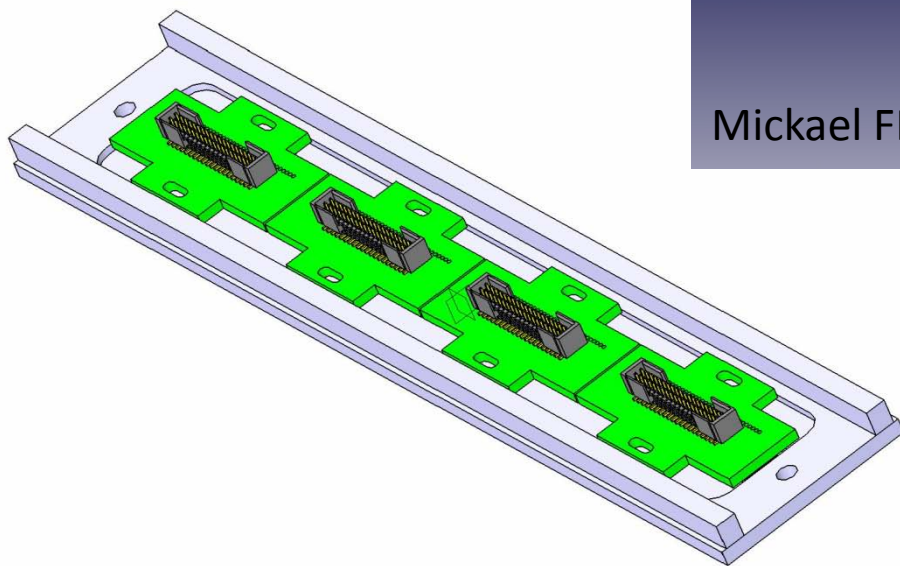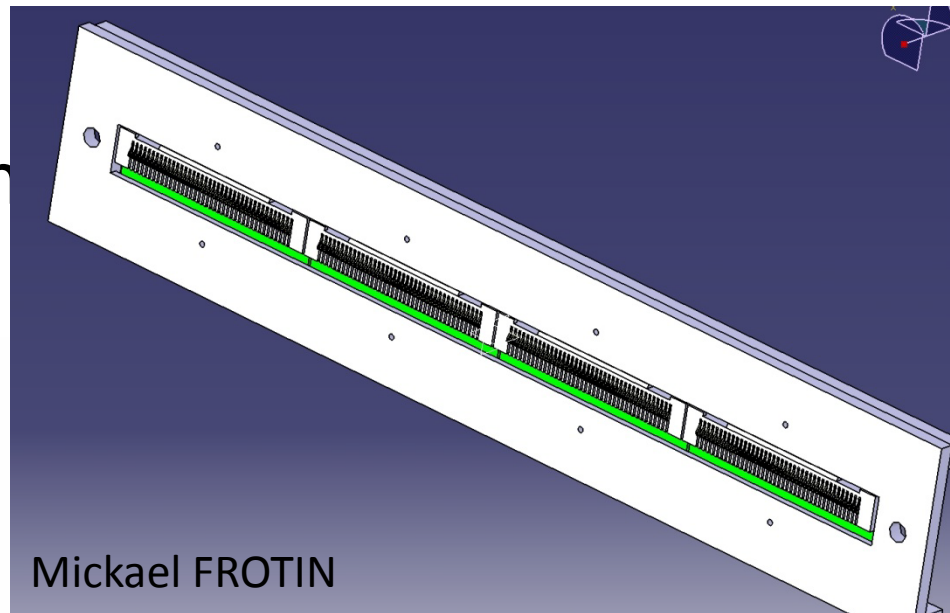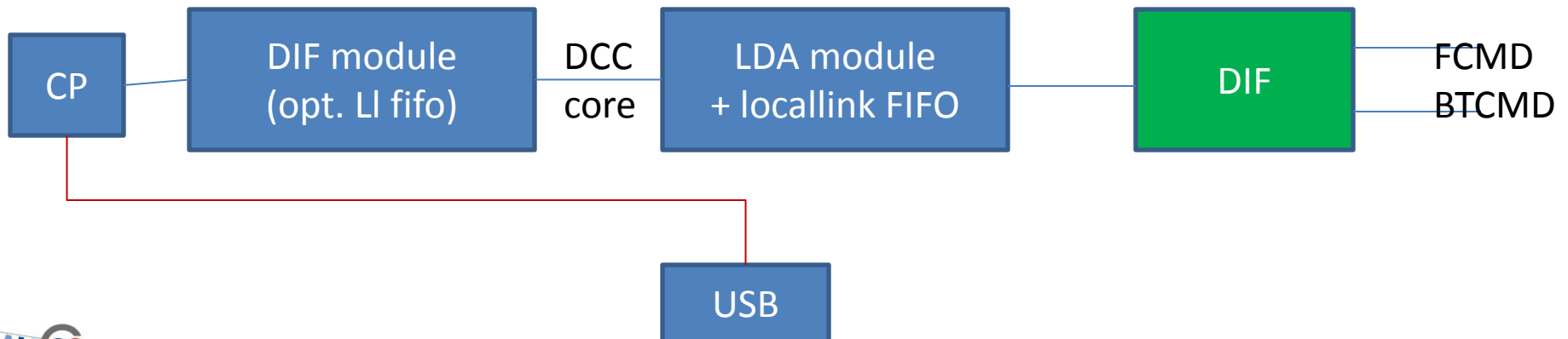
# First SLAB prototype assembled (03/07/09)



FEV7_CIP

Detector InterFace

Adapter Board (dev)

# Solderless connector

- Ready by 2 weeks
- Then start tests with

ASU 'CIP'



Mickael FROTIN

# HW tests

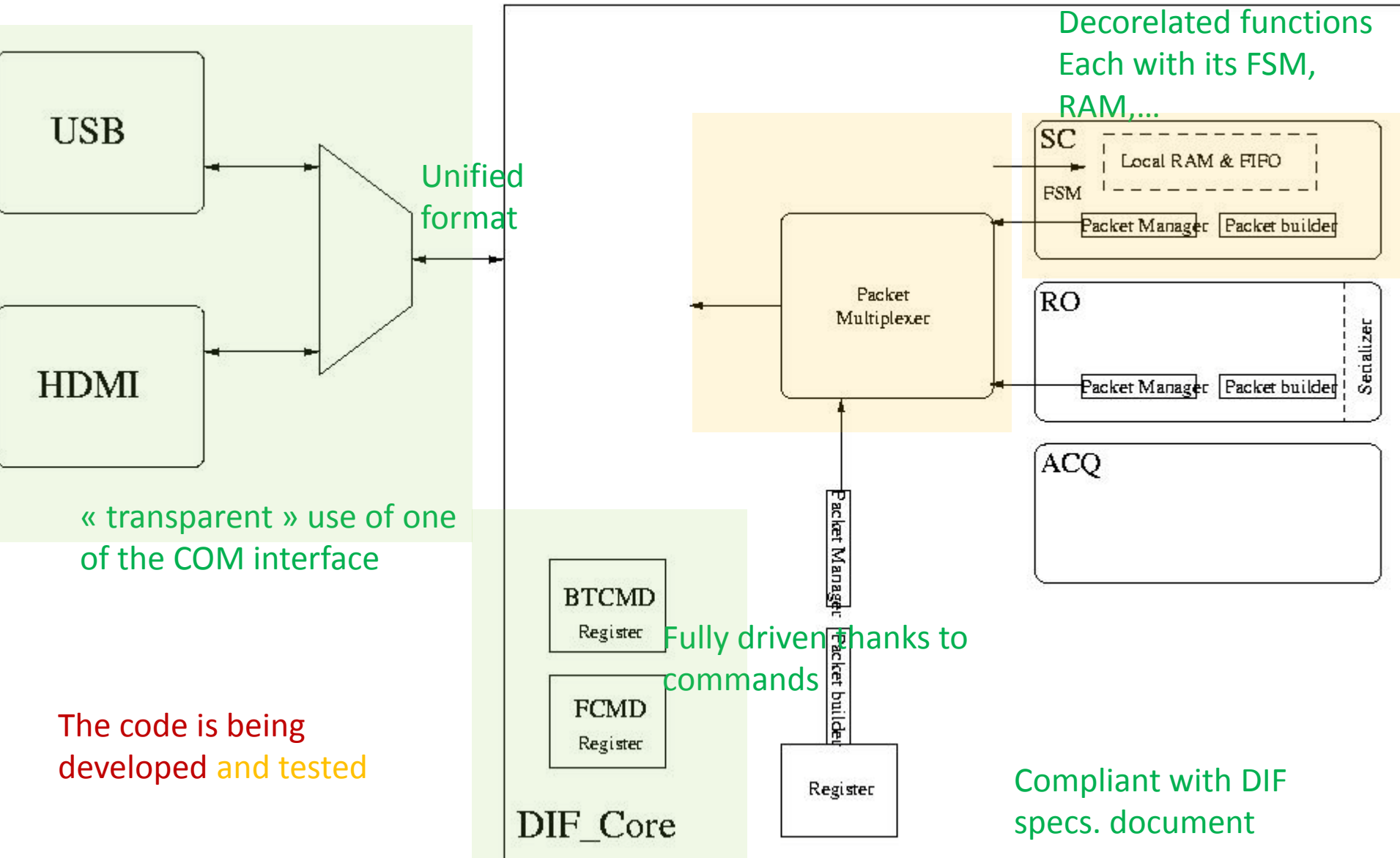- CMD generation through HDMI
  - Two cascaded DCC
    - USB – DIF-LDA-DIF-LDA-DIF
  - Fast commands

- Block transfer commands (few tested)
  - Unfortunately we have changed test room
    - Only fast commands are working now
  - Code to be updated from UK new versions

```
CP ── DIF module      DCC   LDA module        DIF ── FCMD
      (opt. Ll fifo)  core  + locallink FIFO       ── BTCMD
```

USB

# DIF : basic version

Decorelated functions
Each with its FSM,
RAM,…

Unified
format

« transparent » use of one
of the COM interface

The code is being
developed and tested

Fully driven thanks to
commands

Compliant with DIF
specs. document

# (ecal) DIF development

- March'10 : DIF working with a DCC board
  - Serial link tested and validated
  - Part of specifications of the hdmi side implemented
  - USB I/O of the DCC
- June'10 : DIF working with a DCC + LDA
  - (almost) full specifications implemented
  - Including ROC chips functions (from Guillaume/Mathias)
  - Ethernet I/O of the LDA
  - SW for debug & Test

*Not before*

- September'10 : more than 1 DIF working with a DCC + LDA
  - Synchronization with "final" DAQ SW
- Later on : to be discussed