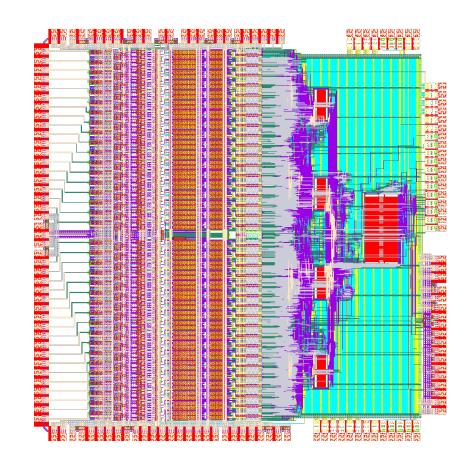
## ASIC development

## KLauS-6 ASIC:

- Low-power SiPM charge and timing readout ASIC for AHCAL, alternative to SPIROC ASIC
- 200ps binsize channel-wise TDC implemented
- Power-pulsing for the whole chip including the **digital part**

## • Status:

- Submitted in 2019.07.29, received on 2019.11 but with fatal problem due to the fabrication misconduct
  - Wrong manufacture process
- Re-processed in 2020.02.04, expected within 4 months



## New AHCAL HBU with KLauS ASIC

- The KLauS-HBU with KLauS-5 (BGA package):
  - All HBU hardware and labview software are re-designed and prepared by DESY/FEB
  - USB readout scheme for the first debuging step
  - New SiPM sensor with smaller pitch, Hamamatsu S14160-1315PS
  - Scintillator tiles partially assemled, cosmic moun test on-going

Results of the very first spectra measurement



