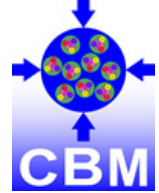
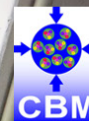


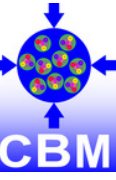
The mCBM experiment
at GSI SIS18
June 16, 2021



28th mCBM Meeting

January 31st, 2022

Christian Sturm



mCBM beamtime schedule 2022

March 6 - 13, few hours ???

C + Ni 2.0 AGeV

start of commissioning with beam

March 25 - 31, 2 shifts

^{238}U + Au 1.0 AGeV, high-rate tests

test of MUCH GEM & RPC

April 10, 1 shift ???

^{56}Fe + Ni 1.8 AGeV

continuation of high-rate tests

May 24 - 28, 6 shifts

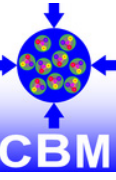
^{58}Ni + Ni 1.9 AGeV

1st benchmark run

June 8 - 17, 5 days / 15 shifts

^{197}Au + Au 1.2 AGeV

- 2nd benchmark run 9 shifts
- adaption of setup 1 shift
- high-rate tests 5 shifts



ToDo - mCBM campaign 2022

Dry runs / cosmics runs:

- Status TFC
- Common system with TOF & TRD, TOF & TRD & RICH, TOF & TRD & RICH & STS, + MUCH
- "Simple" online selection / filtering - towards Au+Au run

STS

- Restart / check U3 (configuration)
- Origin of data spikes (51.2 μ s noise)

TRD

- Upgrade of TRD-2D
- TRD-1 - origin of high noise level

MUCH

- Integration into common data stream (software)
- detector test / stability test

Simulation:

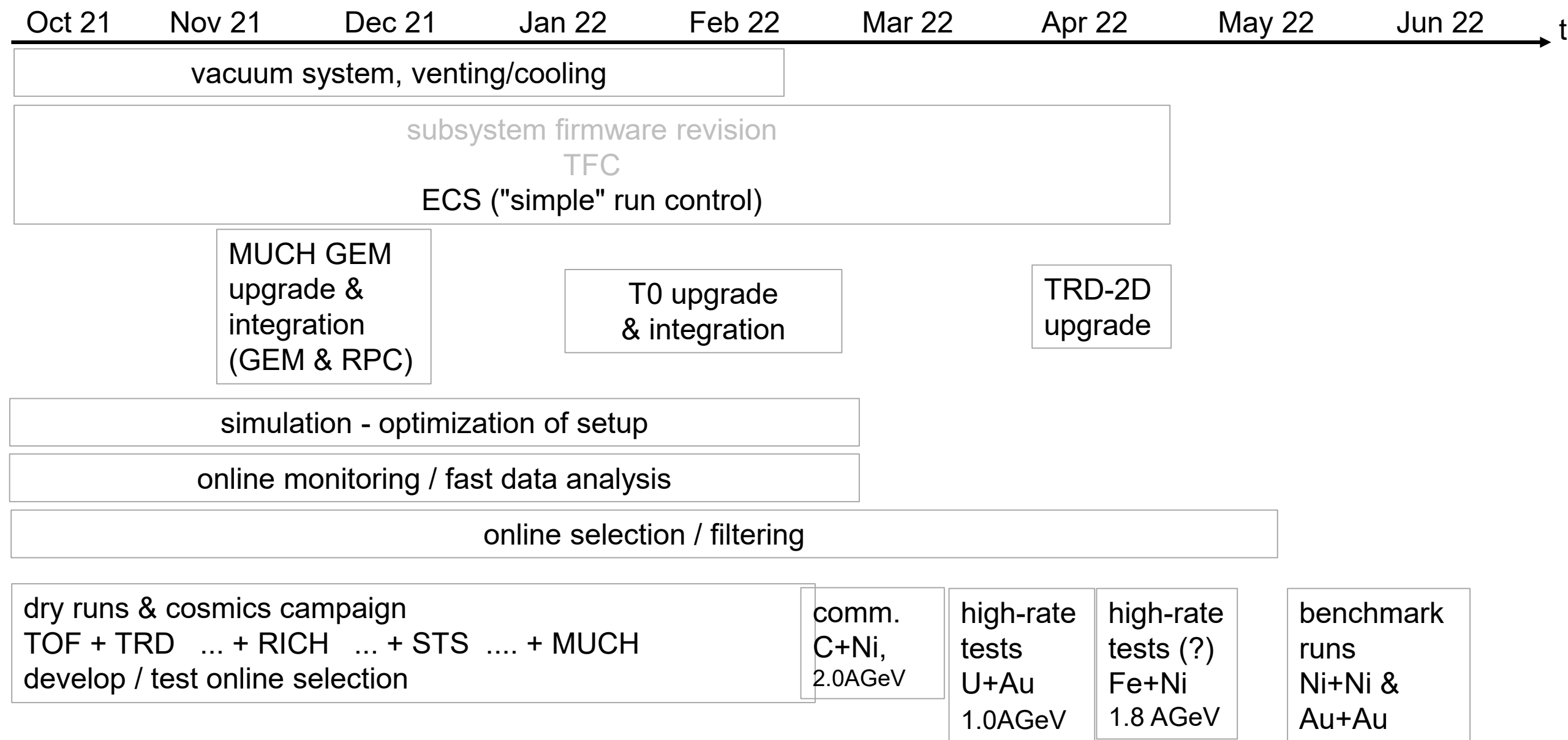
- event-based Ni+Ni 1.93A GeV, Au+Au 1.23A GeV \rightarrow Λ reconstruction strategy \rightarrow optimization of the setup !
- time-based

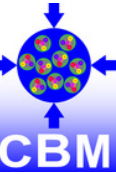
Online monitoring / fast data analysis:

- QA DAQ / data transport
- QA subsystems

ECS / "simple" run control
(for at least "experienced users")

mCBM beam campaign 2022 - schedule





Today's preparation and discussion session

- dry runs / cosmics runs
- Status of the TFC
- Status of the online software
- Status of the MUCH system (GEM & RPC)
- Status of the TRD-2D upgrade
- Status of LGAD & diamond