ESCAPE
European Science Cluster of Astronomy & Particle physics ESFRI research Infrastructures

university of groningen

Progress report in ESCAPE-RUG collaboration

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WP5 Progress Meeting, 27 January 2021

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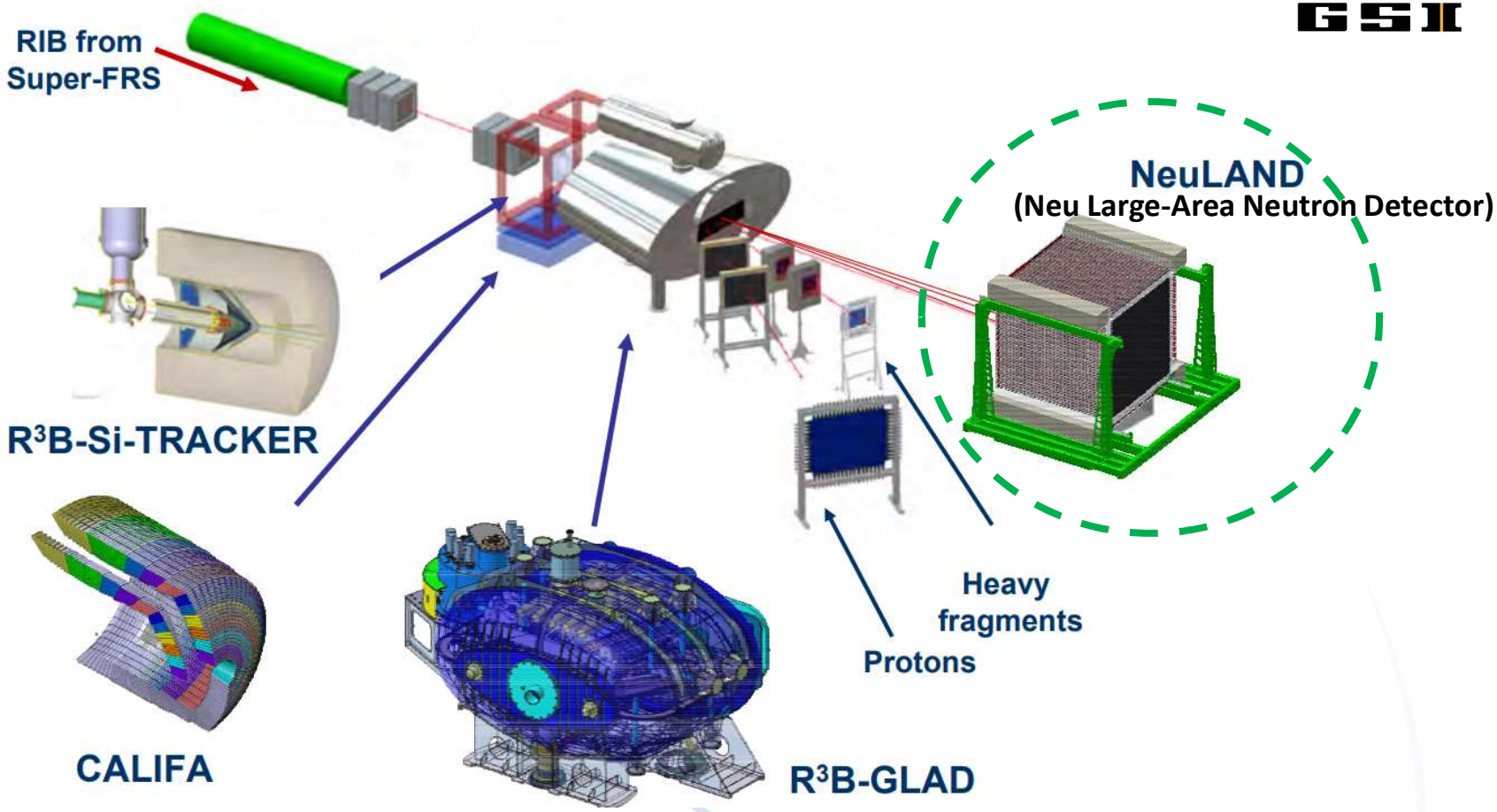
R3B-NeuLAND

R3B (**R**eactions with **R**elativistic **R**adioactive **B**eams)



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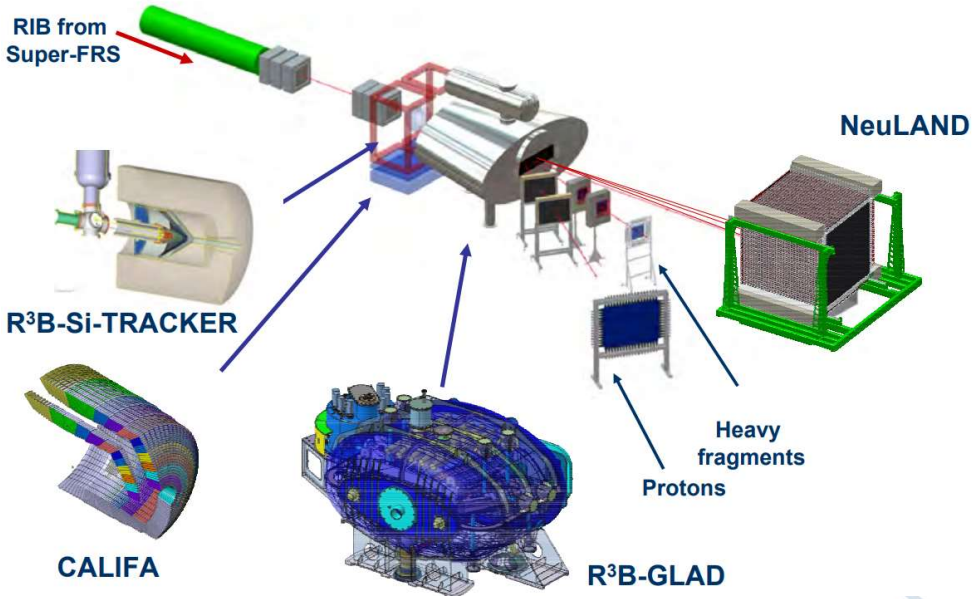

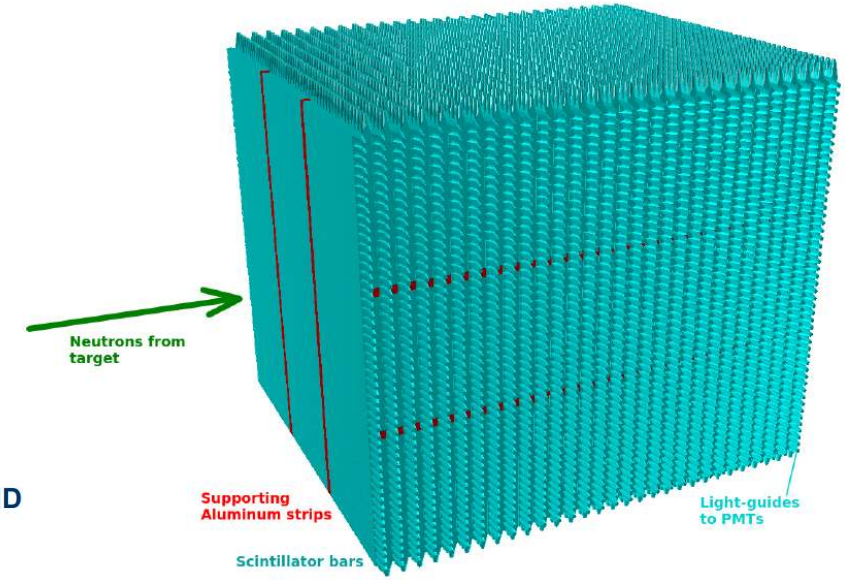

- 30 doubleplane (dp)
- 100 V-H scintillators/dp
- 2.5*2.5 m2

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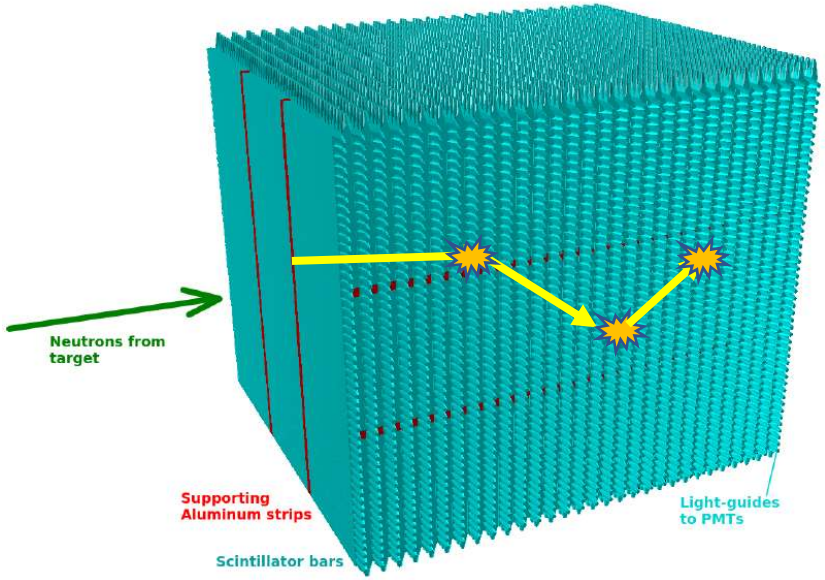
R3B-NeuLAND

- Multiplicity determination
- Shower head determination



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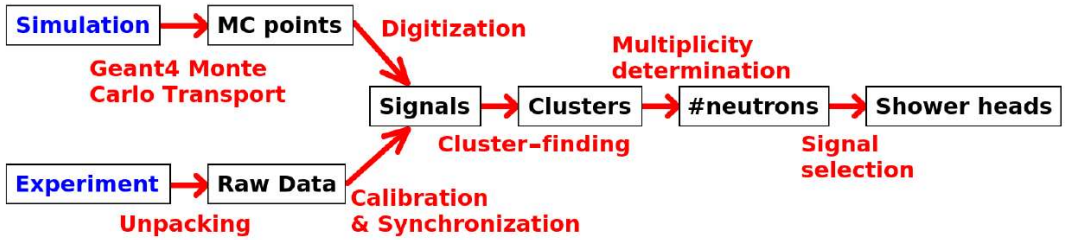

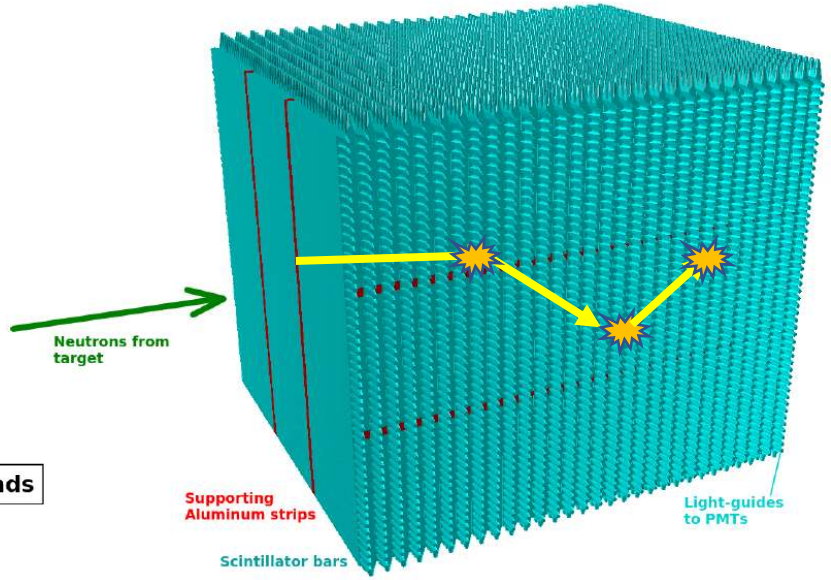

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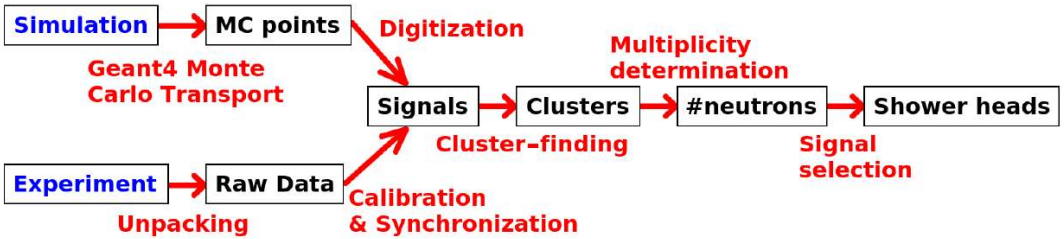

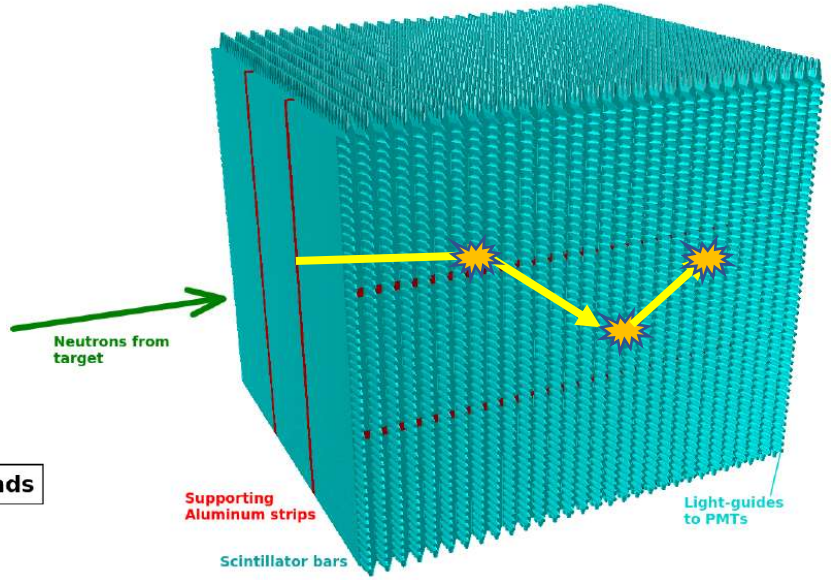

Analysis methods:

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- Deep Neural Network (DNN)

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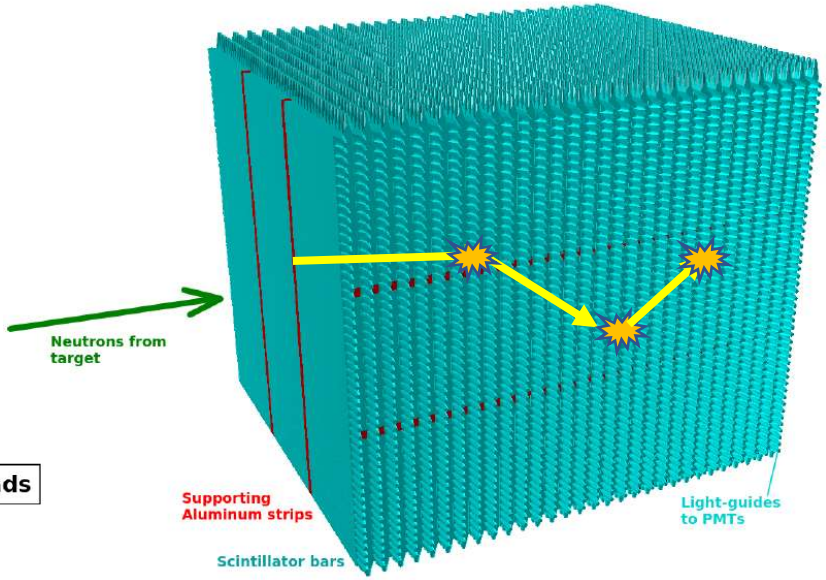

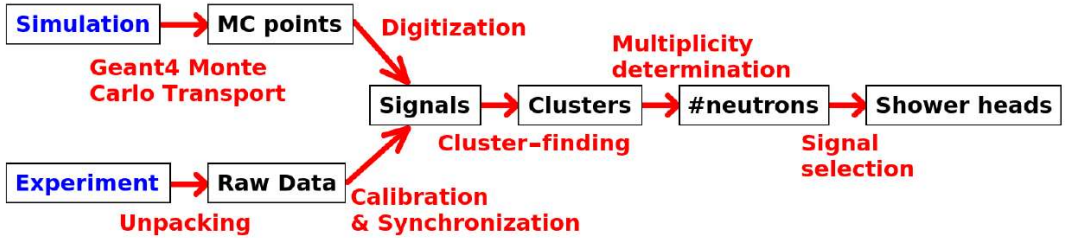

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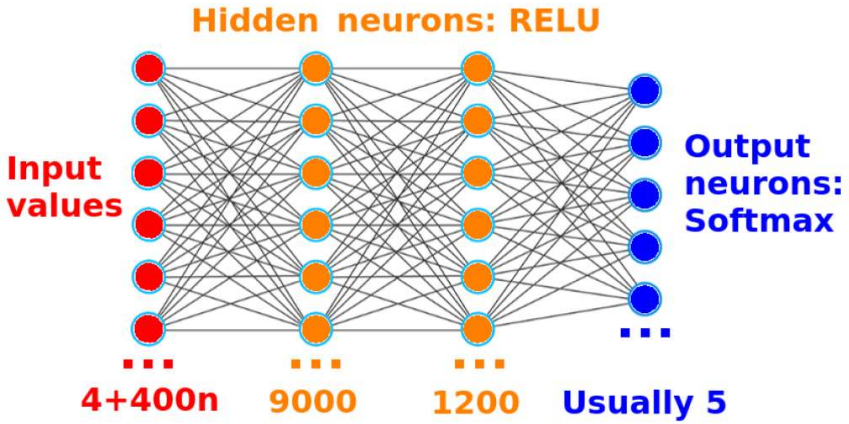

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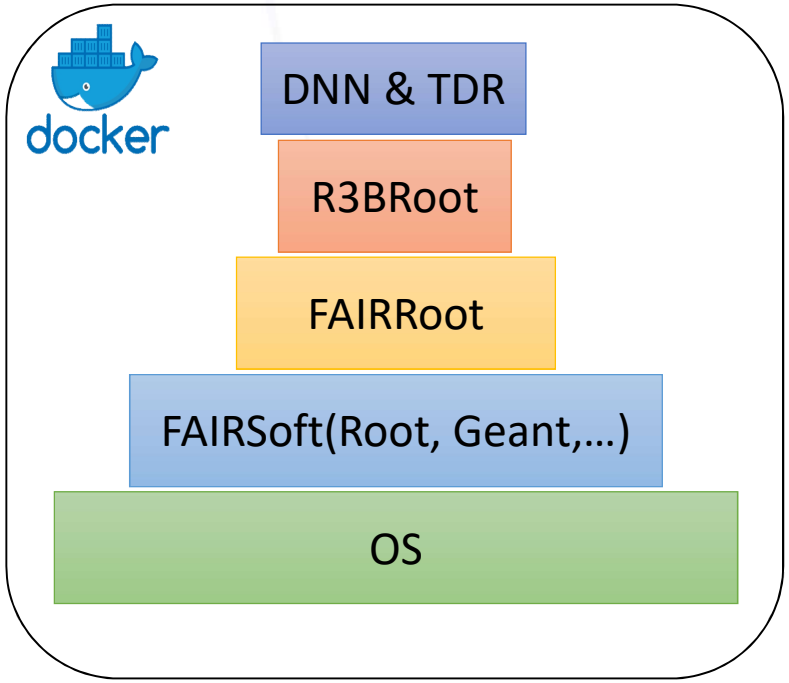

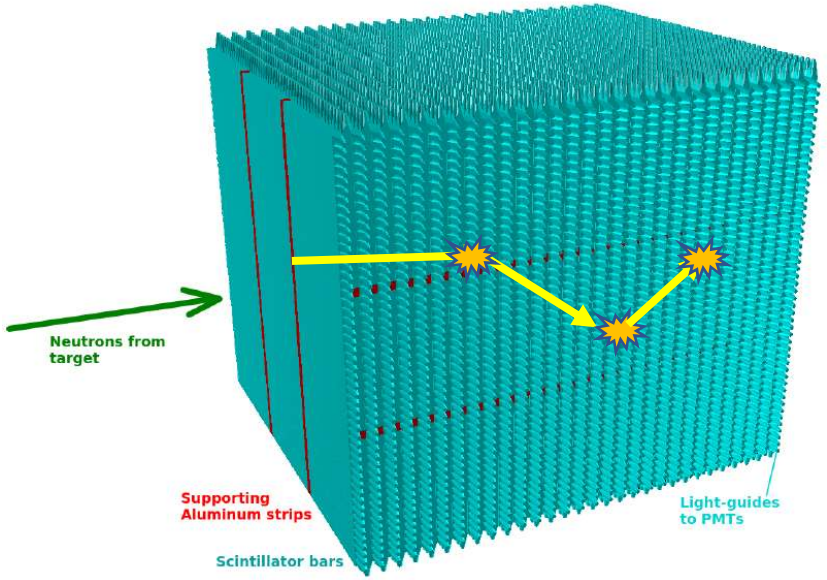

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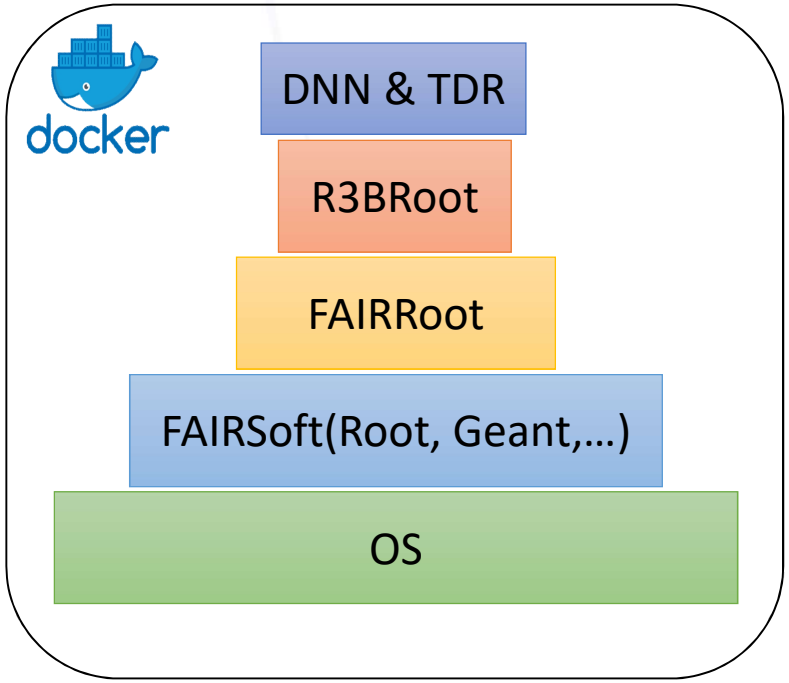

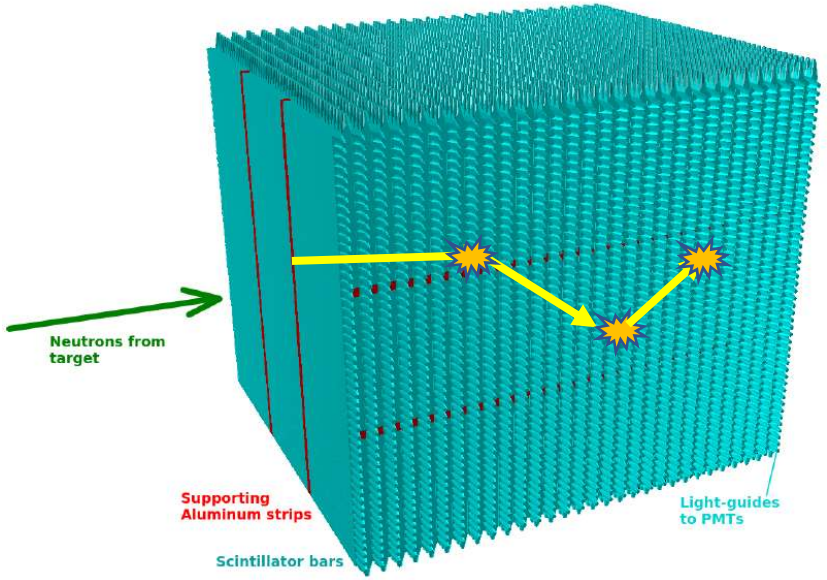

- Some Jupyter NBs have been provided (mostly in PyROOT)
- ~ 16 TB of data have been generated.
- Deploying a JupyterHub service at RUG is in progress.

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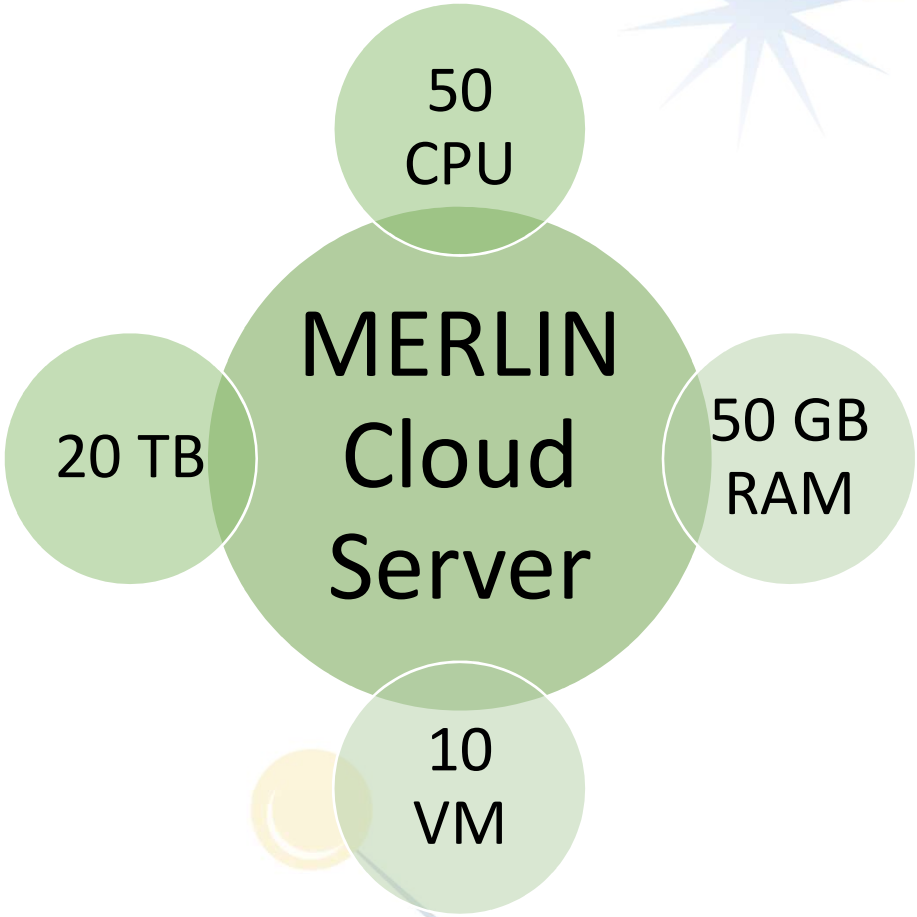
Our resources @ RUG-CIT



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Next steps

- Accomplish the in-progress tasks that are mentioned.
- Doing a data accessing test between RUG and GSI.
- Creating a multi-user Jupyterhub with data interfaces to both data lakes (the FAIR implementation and the CERN implementation) for both user groups R3B and CBM.
- Integrating our data analysis service into the ESAP.

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