

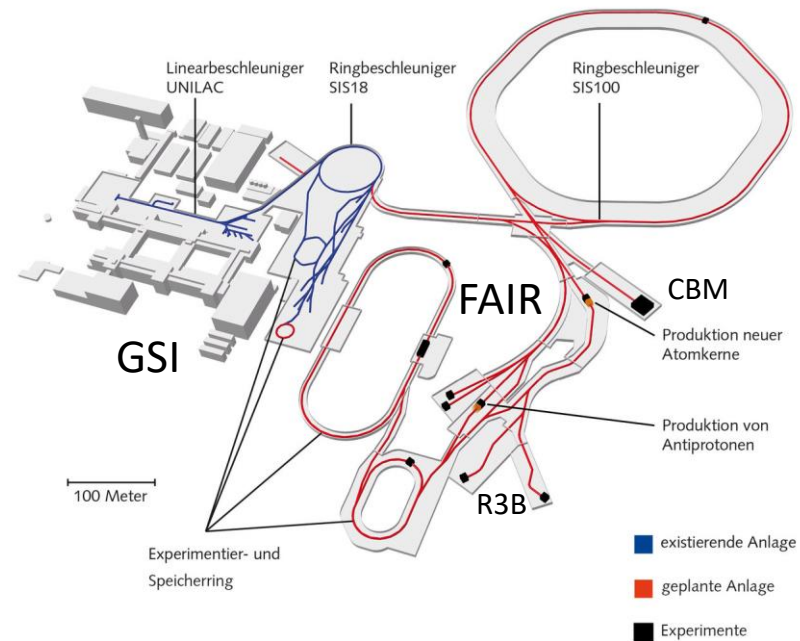
Status of RUG-GSI/FAIR use cases for ESCAPE and integration challenges with WP2

Maisam M. Dadkan

On behalf of the RUG-FAIR/GSI collaboration for ESCAPE

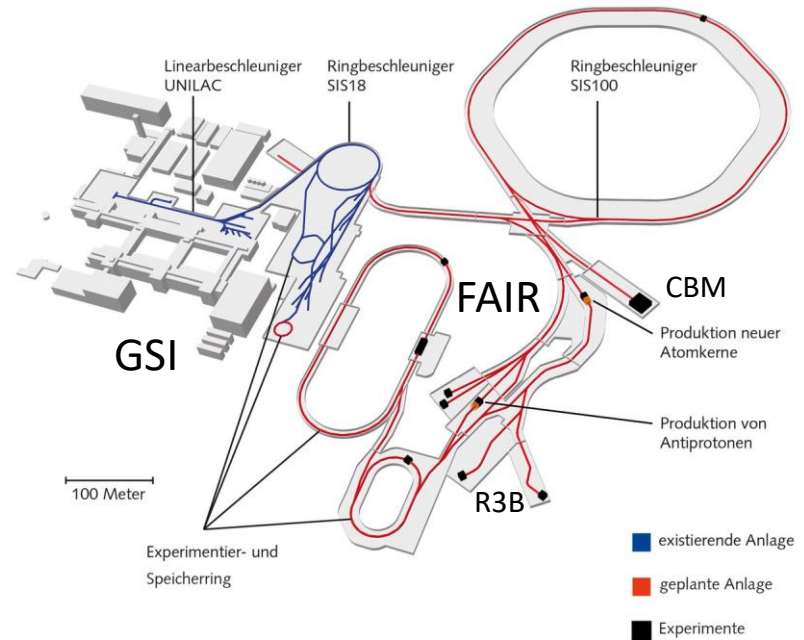
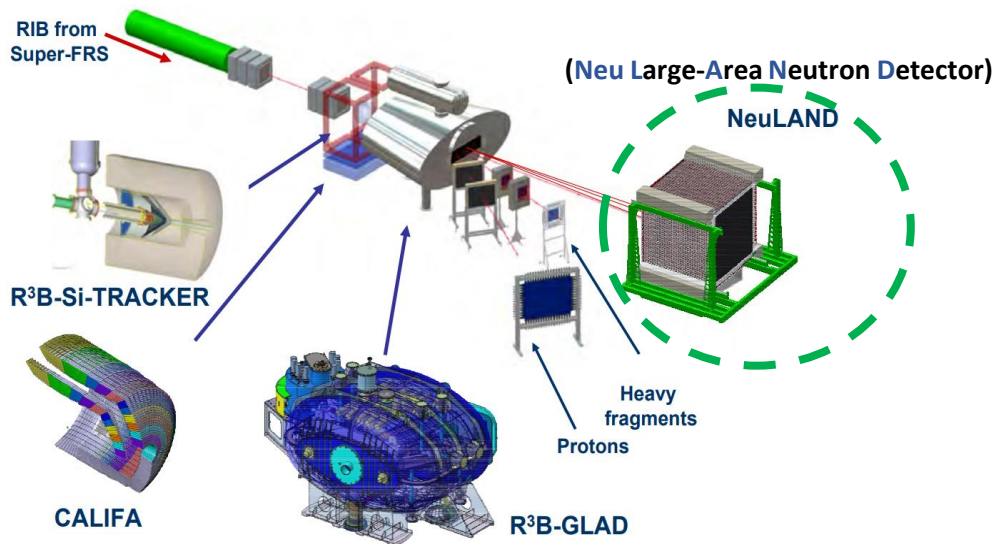
WP5-WP2 Integration Workshop, 6 April 2021

- Introduction to R3B & CBM
- Status of the use cases
- IDAP-DIOS Integration challenges



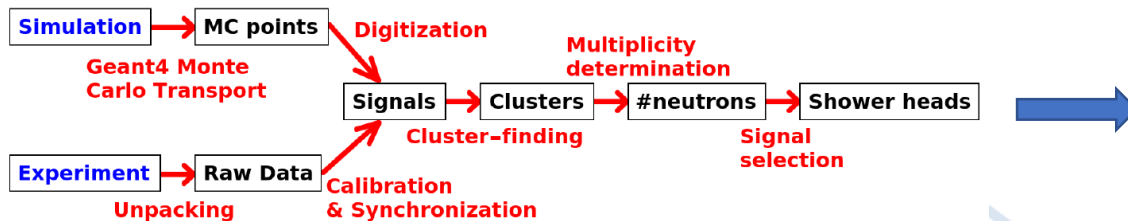
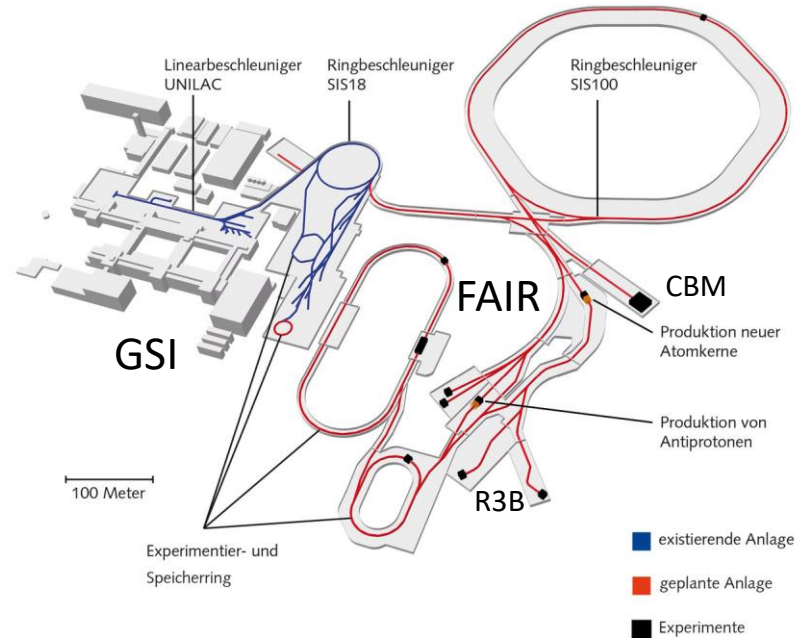
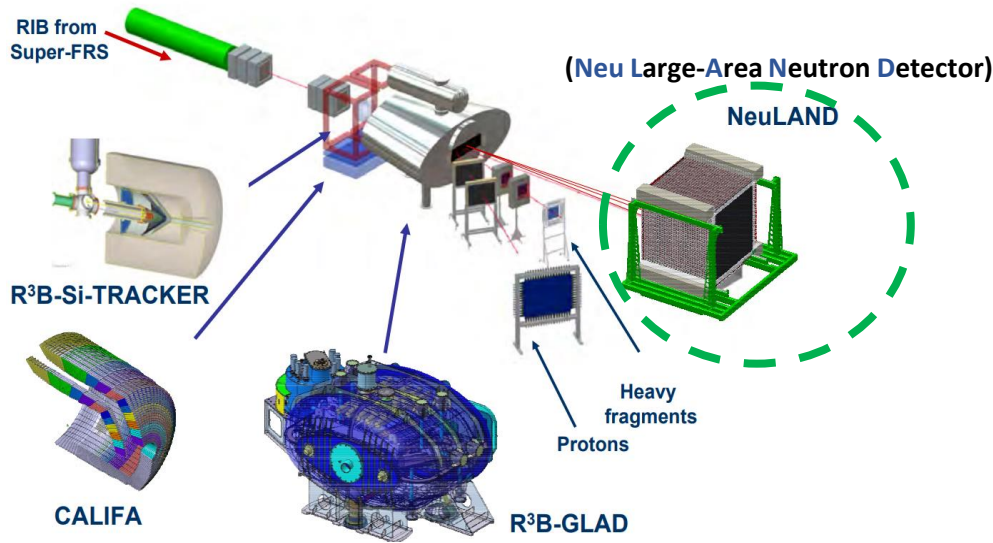
R³B

Reactions with Relativistic Radioactive Beams



R³B

Reactions with Relativistic Radioactive Beams

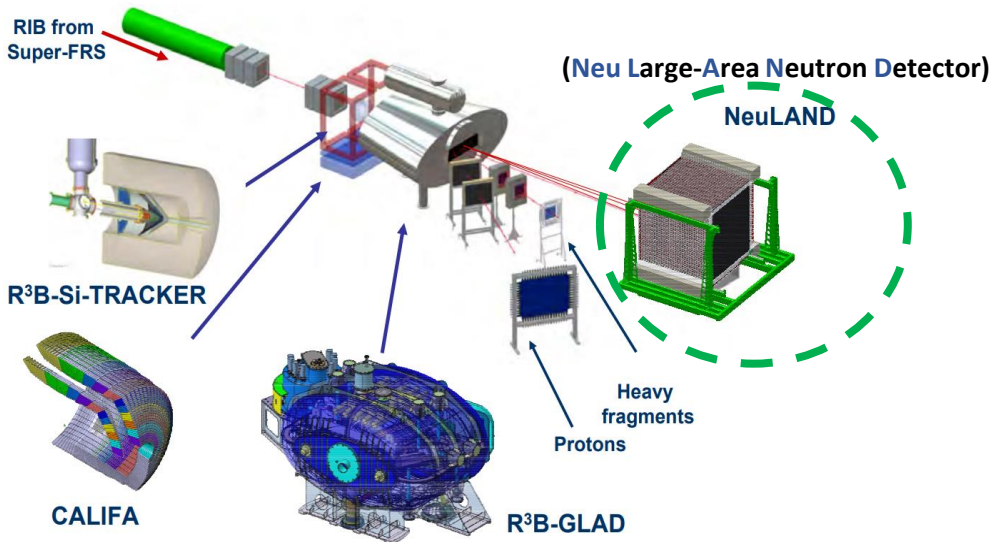


- Multiplicity determination
- Shower head determination



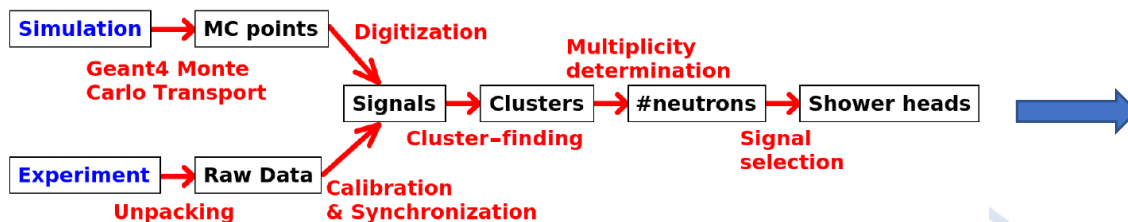
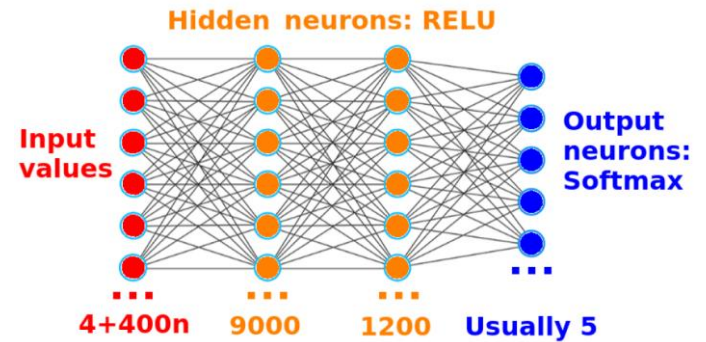
R³B

Reactions with Relativistic Radioactive Beams



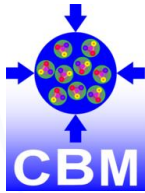
Analysis methods:

- Technical Design Report (TDR)
- Deep Neural Network (DNN)

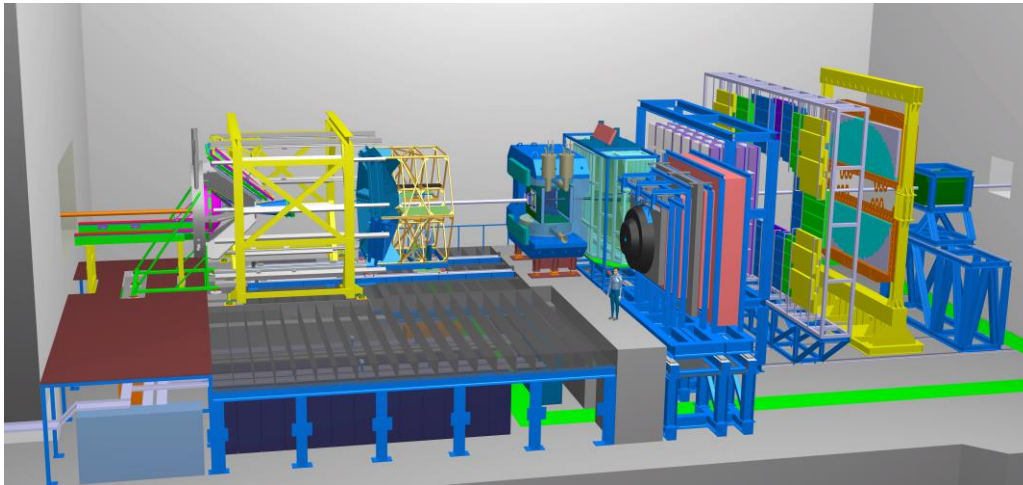
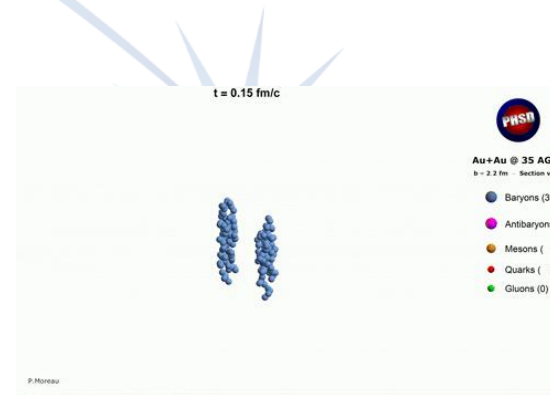


- Multiplicity determination
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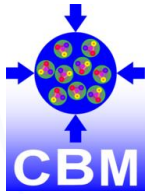


The Compressed Baryonic Matter

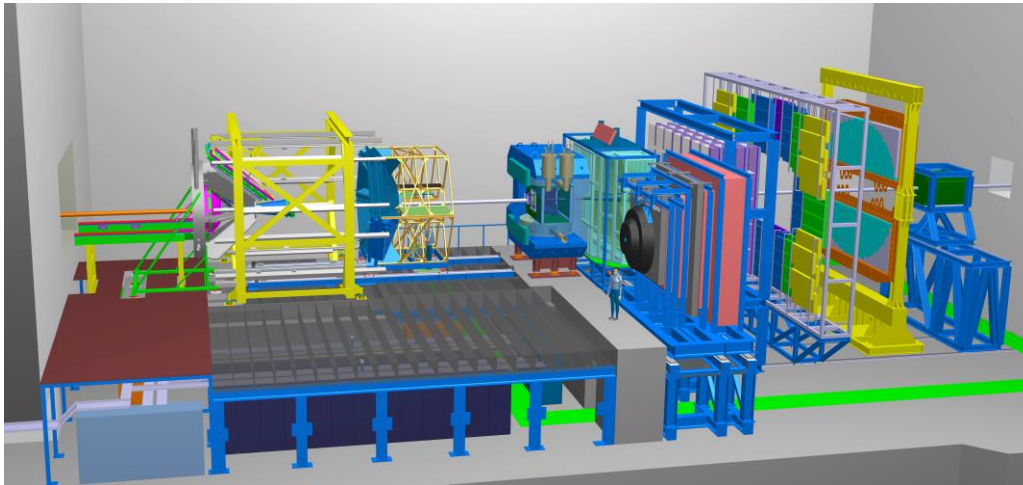
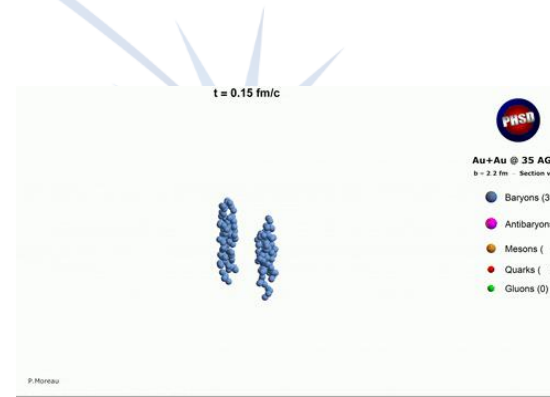


- High baryon densities using high-energy nucleus-nucleus collisions
- Reaction rates up to 10 MHz
- Data rates up to 1 TB per second
- CBMRoot for data analysis

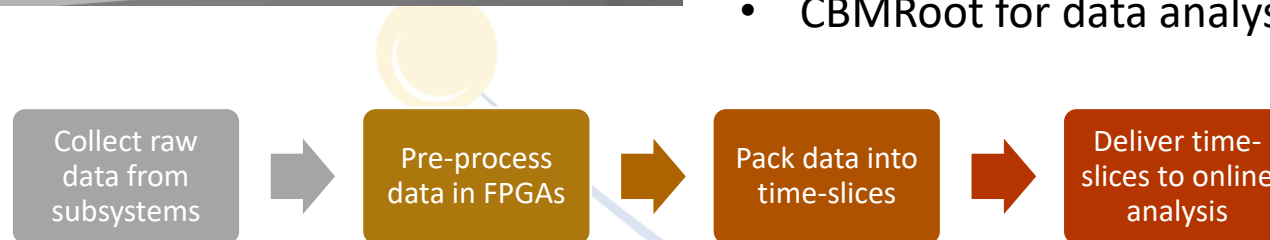


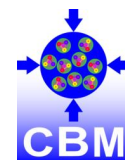
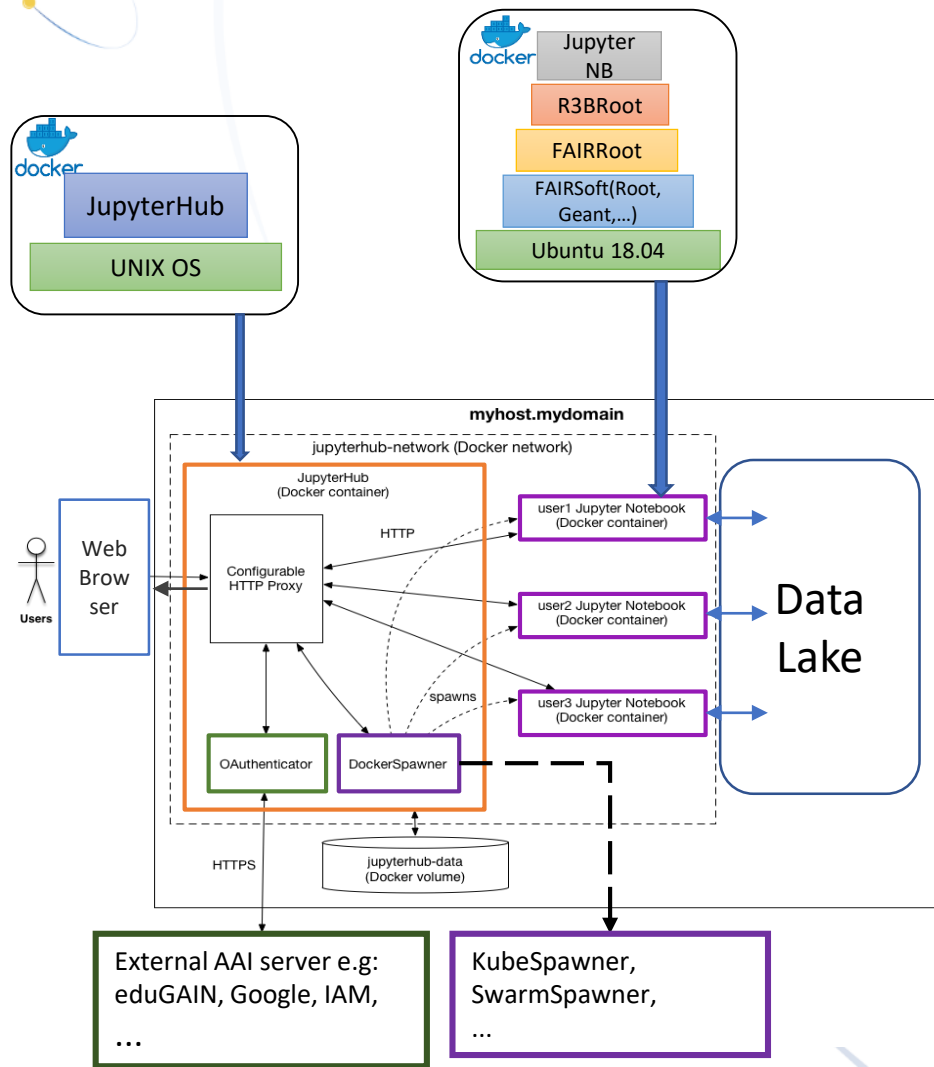


The Compressed Baryonic Matter



- High baryon densities using high-energy nucleus-nucleus collisions
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	R ³ B	CBM
Jupyter NB	✓	✓
Multi-user JupyterHub	✓	In prog
Data lake access (r/w)	In prog	✓
Interfaced with ESAP	Planned	Planned
Software license	Planned	In prog
Data server	In prog	2 x Xrootd +VOMS



Rucio related issues:

- Lots of manual work
- Server side issues
- Problems with gfal
- Errors with naming schemes
- Connection issues when uploading/downloading files
- How and where to integrate Rucio in our software stack
- Lack of a comprehensive manual for RUCIO configuration
- AuthN in Rucio needs to be managed by the end user (even in the JupyterLab extension)

