

Discussion session.



GRADLCI

Collaboration meeting 2018.10
Karlsruhe, 30.10.2018

definition?



- SQL/NoSQL?
- Types
 - Raw data (Kaitai)
 - Reconstruction (KCDC metadata)
 - Simulation (SiMM metadata)
- Tentative schedule for metadata implementation (Tokareva, Nguyen, Kostunin)



- Metadata + UUID
- Tunka-Rex/LOPES data with mapping?
- Simulations for data mapping



- Storage
- Computing



- IACT simulation set
 - Wobble mode
 - Diffuse gamma
 - Smaller energy bins
 - Real hadronic background
- Tunka-Rex ML progress
 - Testing on real data
 - Publication in journal
 - Application in other Tunka radio projects



Science cases (combined analysis)

- Anisotropy study
- Neutrino + diffuse gamma search
- HAWK high-energy sources
- Study of hadronic interactions
- What means multimessenger in frame of the project?



- First candidate: Tunka-Rex
 - Replace Shipilov with Fedorov
 - Working group: Nguyen, Fedorov, Kazarina, Kostunin, Lenok, Bezyazeekov
 - Container for high-level/meta data: (My/Postgre)SQL
 - Container for low-level data: HDF5
 - Simulations
- Tunka-133
 - Legal status of data
 - “Final” dataset
 - My guess: data is going to publish after publication of spectrum paper in Astropart.Phys.
 - X_{\max} analysis is still in progressm



- Content, killer-features, etc
- Content manager
- System administrator
- Framework



- Organizing RU/GE parts of collaboration: merge as much as possible, more transparency



Input from Nguyen

- 1) Building the metadata DB From my point of view. The joint data scheme shown by Victoria Tokareva is quite valuable. From the scheme we can define a list of metadata parameters. From the scheme we also understand the typical usage patterns of an user, and consequently from that we can define a list of queries and their results. Based on the usage patterns and parameters we can find out how we should index the files, how to store the indices, what database implementation should be used, and of course how the API should look like.
- 2) Creating file access filters from query results and adding filters to cvm-fs From the query result we can define a list of possible files which should be listed in it. I need such a list to understand how to implement the filter in cvm-fs.
- 3) cvm-fs and KCDC data storage As far as I understand KCDC has its own data storage where the storage is on an xfs file system. I would like to test if cvm-fs server can be added to the data storage without any technical problems.



- Working groups
- Publication strategy
- Participation in ICRC2019

