Status of the Technical Design Report (TDR) for SAND in the ND complex

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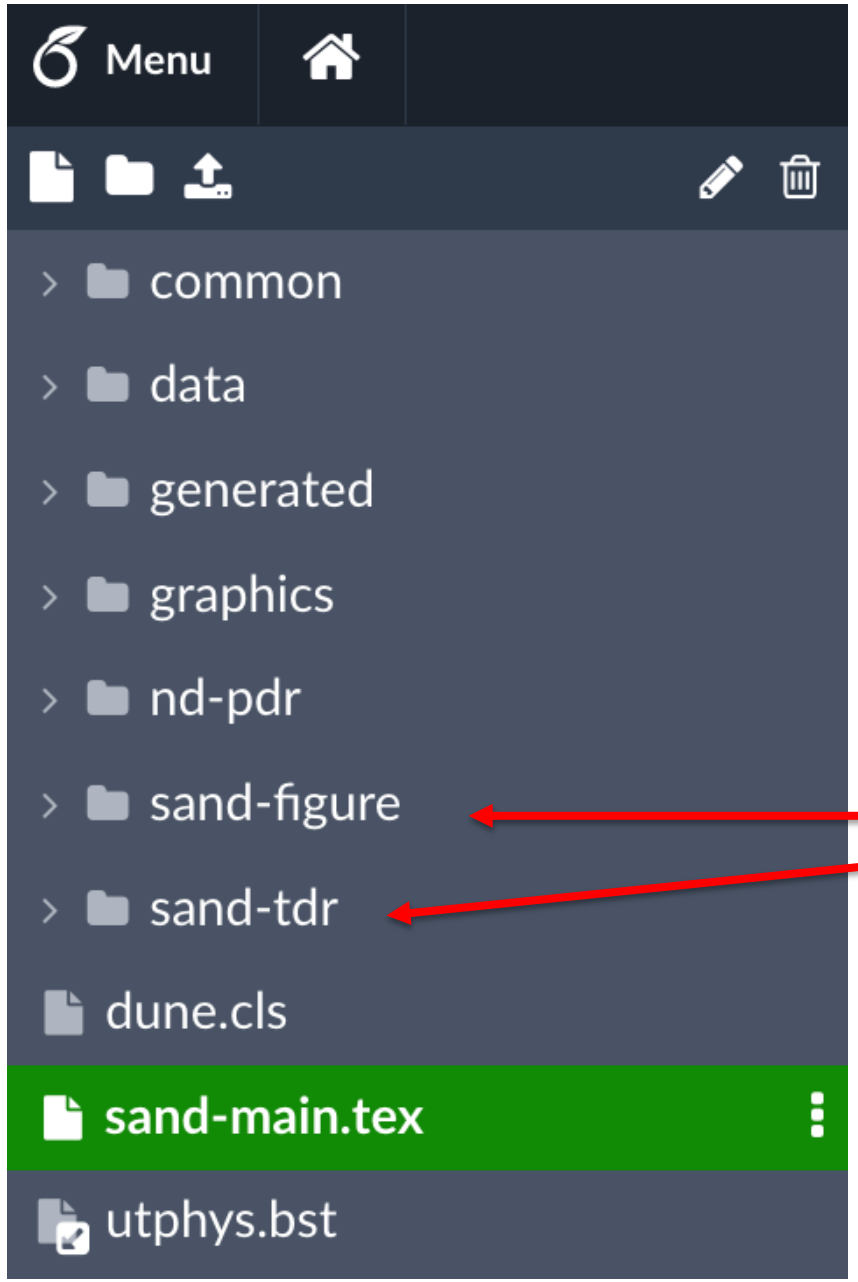
SAND meeting

June 11, 2024

UNIVERSITÀ DEL SALENTO
L'Ateneo tra i due mari

INFN
Istituto Nazionale di Fisica Nucleare

DUNE



An overleaf is adopted according to

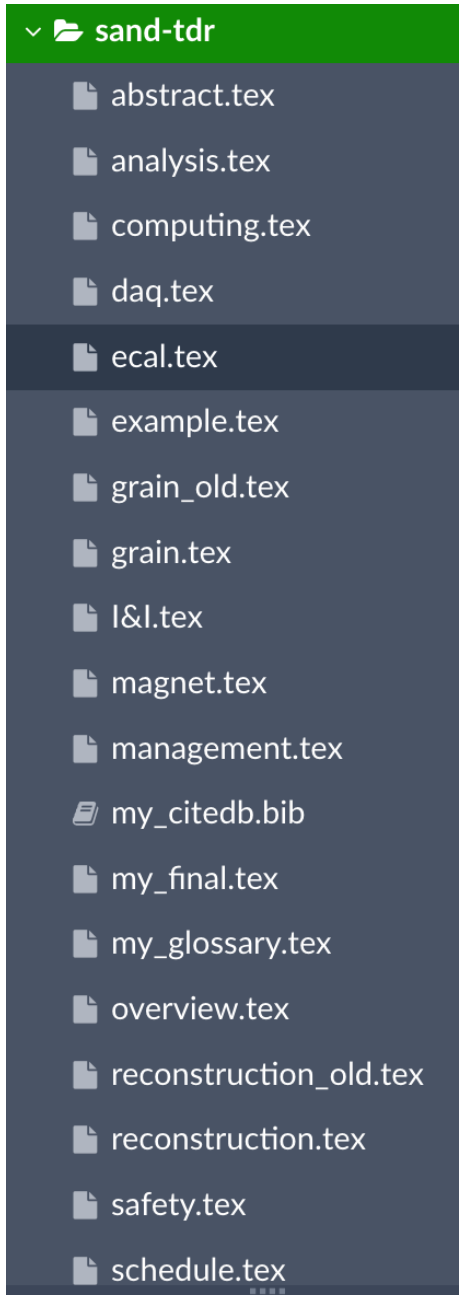
LATEX conventions for LBNF/DUNE documents

(shared with H.A. Tanaka and A.E. Heavey)

The figures in sand-figure and the files in sand-tdr

are input for sand-main.tex

Very simple to transfer text and figures
in the ND-TDR



Sections in the SAND chapter

1. Overview
2. Lead/Scintillating-Fiber Calorimeter (ECAL)
3. Superconducting Magnet
4. Liquid Argon Active Target (GRAIN)
5. Tracker
6. Data Acquisition (DAQ) Architecture
7. Detector Control (DCS)
8. Detector Safety System (DSS)
9. Software & Computing
10. Event Reconstruction
11. Analysis
12. Installation & Integration
13. Safety
14. Organization & Management
15. Time Schedule
16. Possible Upgrades

Glossary
References

New DUNE words and new references in evidence (at the file end)

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Plan

1. At least 2 authors for each section done
2. Index & key words for each section done
3. Data collection & write-up in progress
4. Internal reading & correction to be organized

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Present status : more than 120 pages

- corrections & many references must be implemented
- Overview section to be updated

The write-up is not homogeneously distributed

RED = sections with more write-up

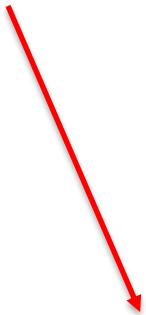
An increase of the write-up rate is expected in order to be ready within the deadlines

Dedicated meeting tomorrow

July 2024 dead lines

Comm. Scient. I SAND (ECAL+GRAIN+tracker)

DUNE/FNAL ECAL+magnet



Expected Materials/Documents:

- Preliminary design report sections describing KLOE magnet and calorimeter, including any modifications, refurbishments, upgrades, and major auxiliary tooling/infrastructure.
- Schedule
- Any permitting needed
- Org charts, agreements relevant to defining roles, scope, and responsibilities

SAND chapter

(yesterday updated)