

Status on SDT simulation

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Update

To add the drift chambers in the CEPCSW :

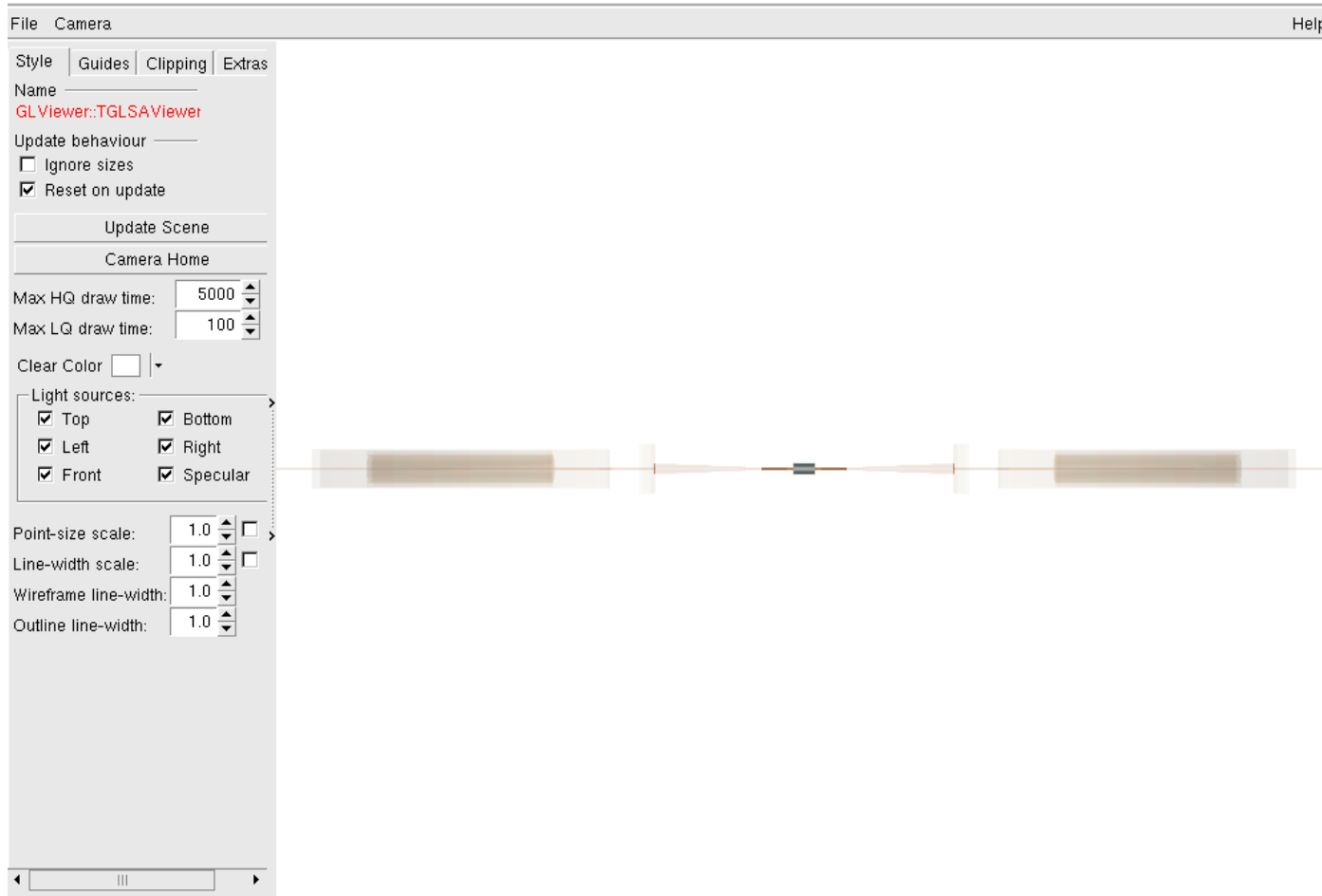
- Read the information

<https://github.com/HEP-FCC/FCCSW/blob/master/Detector/doc/DD4hepInFCCSW.md>

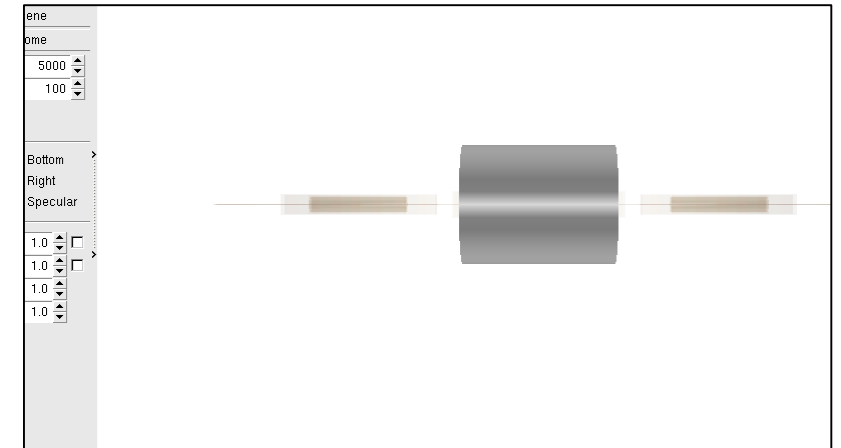
<https://cds.cern.ch/record/2670936/files/CERN-ACC-2019-0043.pdf>

- A quick confirmation of current settings in the CEPCSW
- try the visualization to have a confirmation tool

Visualization as a confirmation tool



-- reflecting “display” settings in the configuration file



Command : `./run geoDisplay -compact CepC_v4-onlyVXD.xml` (left fig.)

`./run geoDisplay -compact CepC_v4-onlyTracker.xml` (right fig.)

Next Steps

- Follow a drift chamber configuration of the IDEA

Top & DCH configuration files

https://github.com/HEP-FCC/FCCSW/blob/master/Detector/DetFCCeeIDEA/compact/FCCee_DectMaster.xml

<https://github.com/HEP-FCC/FCCSW/blob/master/Detector/DetFCCeeIDEA/compact/DriftChamber.xml>

+ some other configuration settings, necessary for the CEPCSW

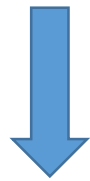
factory method corresponding to the configuration (detector type)

https://github.com/HEP-FCC/FCCSW/blob/master/Detector/DetFCCeeIDEA/src/parametrised_DriftChamber.cpp

-- would need further understanding , such as realization of “sensitive area” for the VXD in the CEPCSW is not understood yet.

Next Steps

- Compilation & visualization
- Confirmation of Hit information (sensitive area)



if it works . . .

- adjust the dimension for a proto-MDC