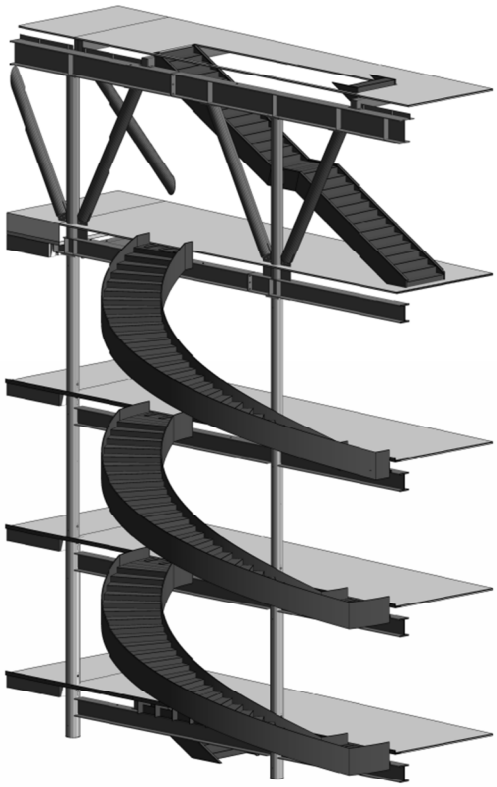
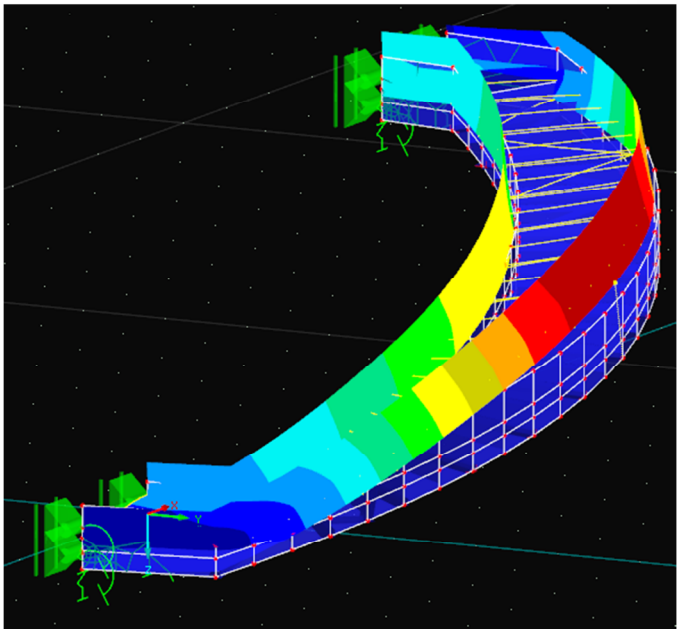
Master thesis – dynamics of staircases

Purpose – Analyse the dynamic behaviour of staircases and how they are affected by the surrounding structure to create a simplified model for future use.

Description – A case study will be done on a pair of newly constructed staircases. The dynamic behaviour of the staircases and the surrounding structure will be measured with accelerometers and the results will be compared to results from FE-models. There haven't been many studies on the dynamics of stairs. This thesis aims at a better understanding of how the load bearing structure connected to a staircase affects its dynamic behaviour. Hopefully the result will lead to a simplified method where consideration is taken to the rest of the structure when modelling the support of the stairs.





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