THE OPAL | COMPUTATIONAL DESIGN

DIGITAL WORKFLOW

Rasmus Holst – Computatinal structural engineering

Søren Jensen ARKITEMA ARCHITECTS EXIGO

THE OPAL - IDA

Søren Jensen

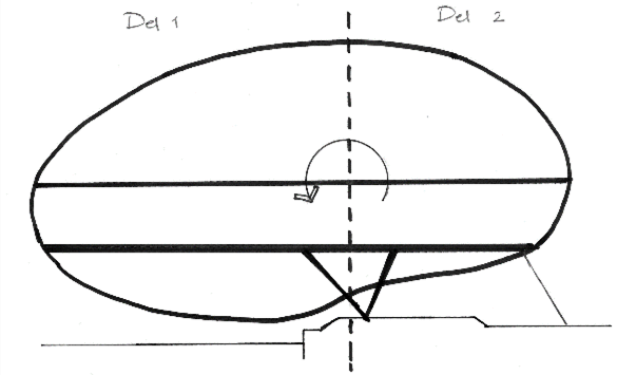
INTRODUCTION

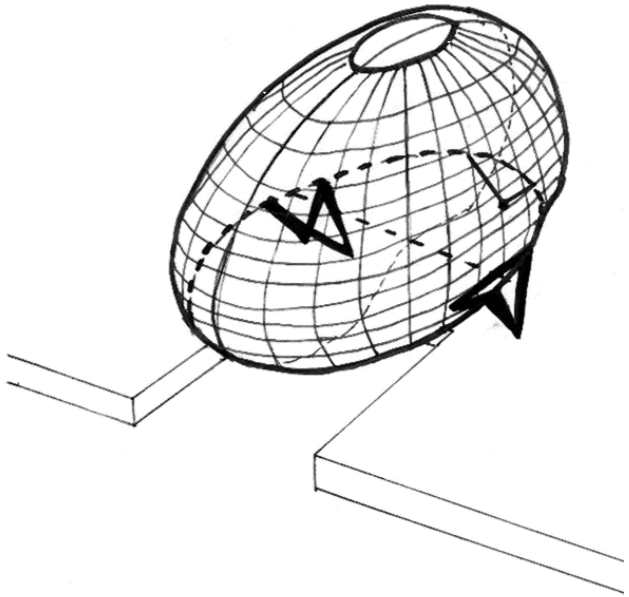
THE OPAL – KALVEBOD BRYGGE

- Cantilevered gridshell
- Restaurant & conference

- Freeform geometry
- Steel / timber hybrid

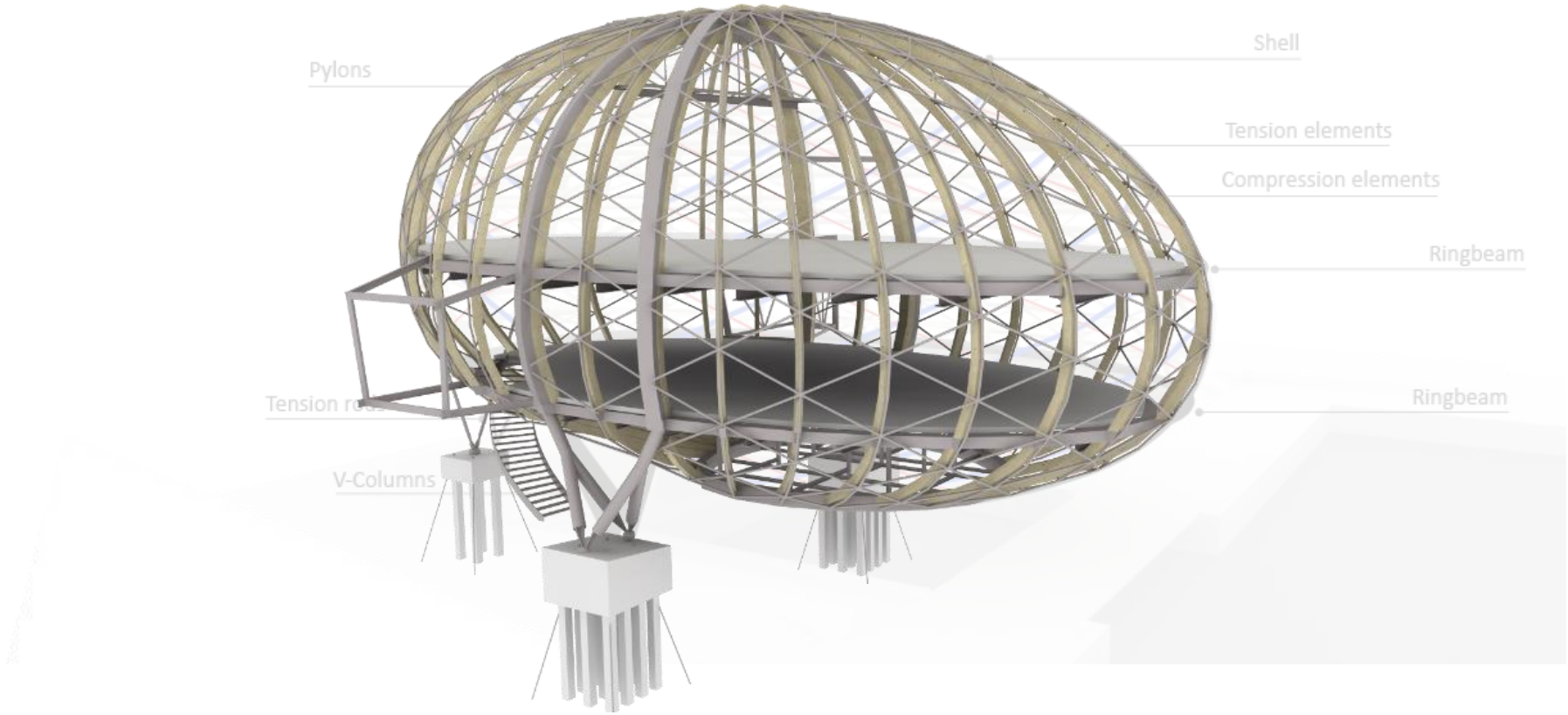
- Computational design
- Integrated design





STRUCTURE

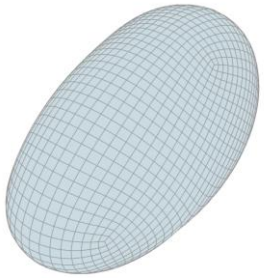
STRUCTURAL PRINCIPLE



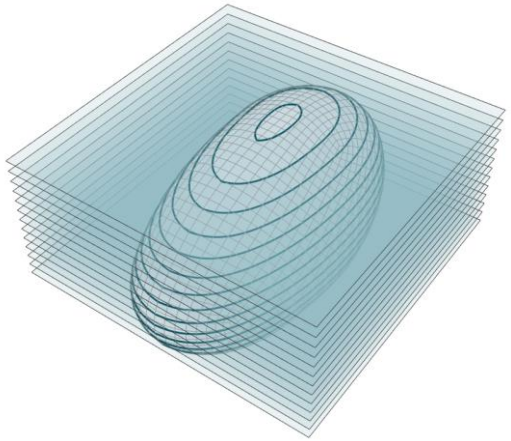
Søren Jensen

COMPUTATIONAL DESIGN

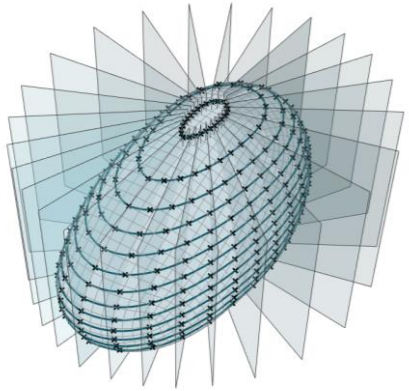
GEOMETRY



BASE GEOMETRY

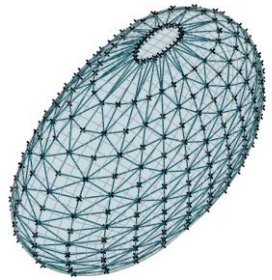


HORIZONTAL CUT



VERTICAL CUT

POINT CLOUD

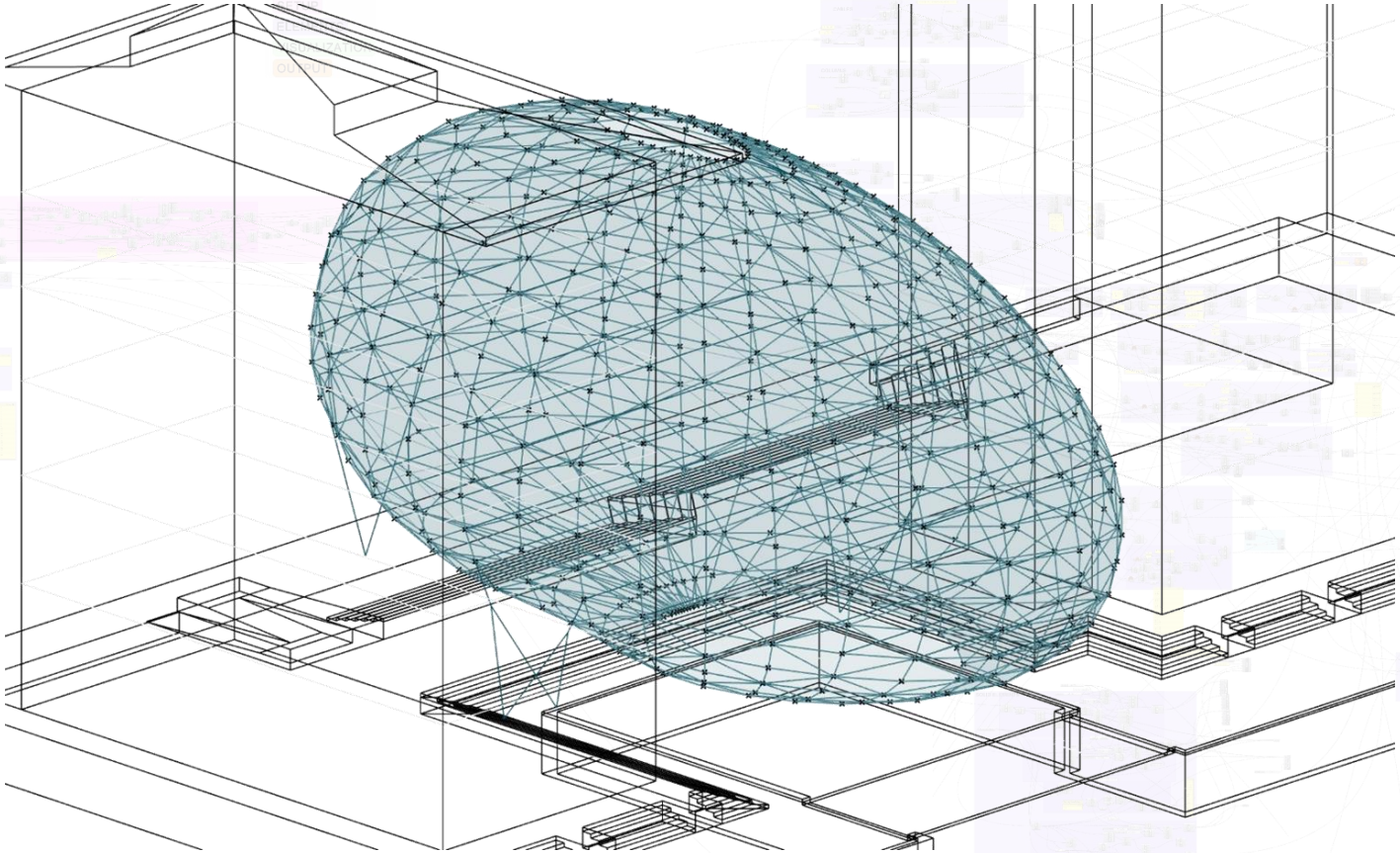


MESH

Søren Jensen

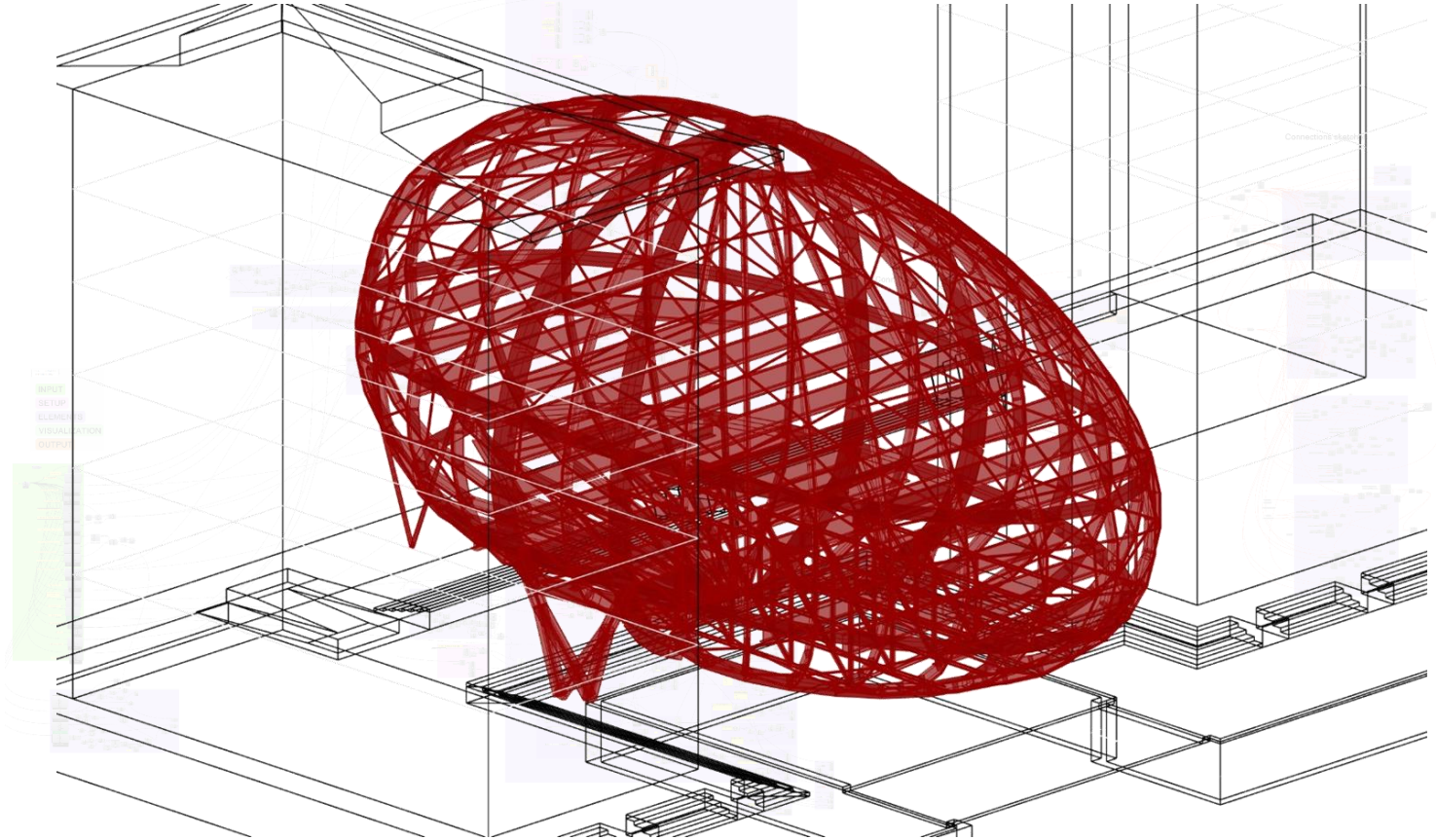
COMPUTATIONAL DESIGN

CENTRAL GEOMETRY



COMPUTATIONAL DESIGN

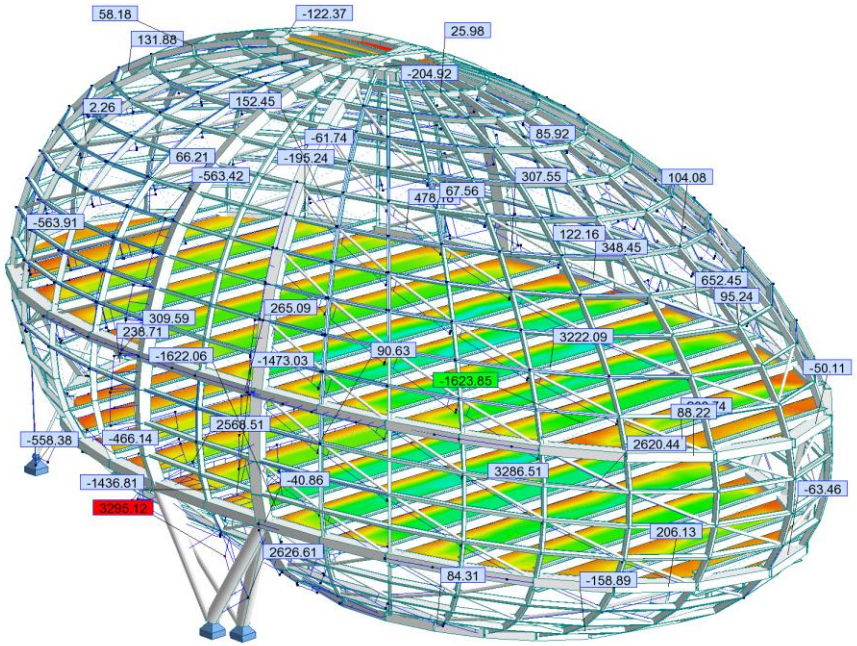
STRUCTURAL MODEL



Søren Jensen

COMPUTATIONAL DESIGN

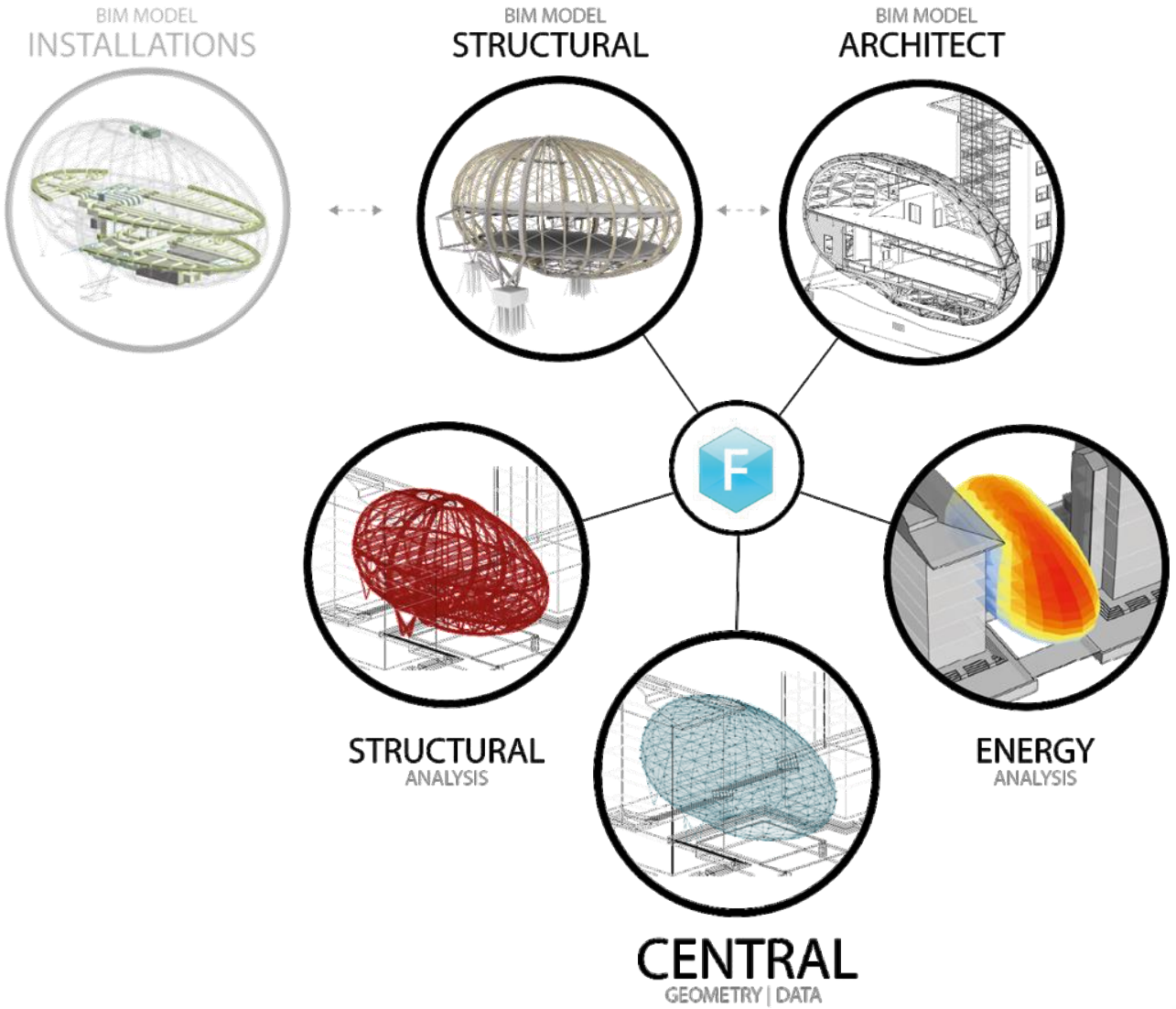
STRUCTURAL FEM MODEL



Søren Jensen

DIGITAL WORKFLOW

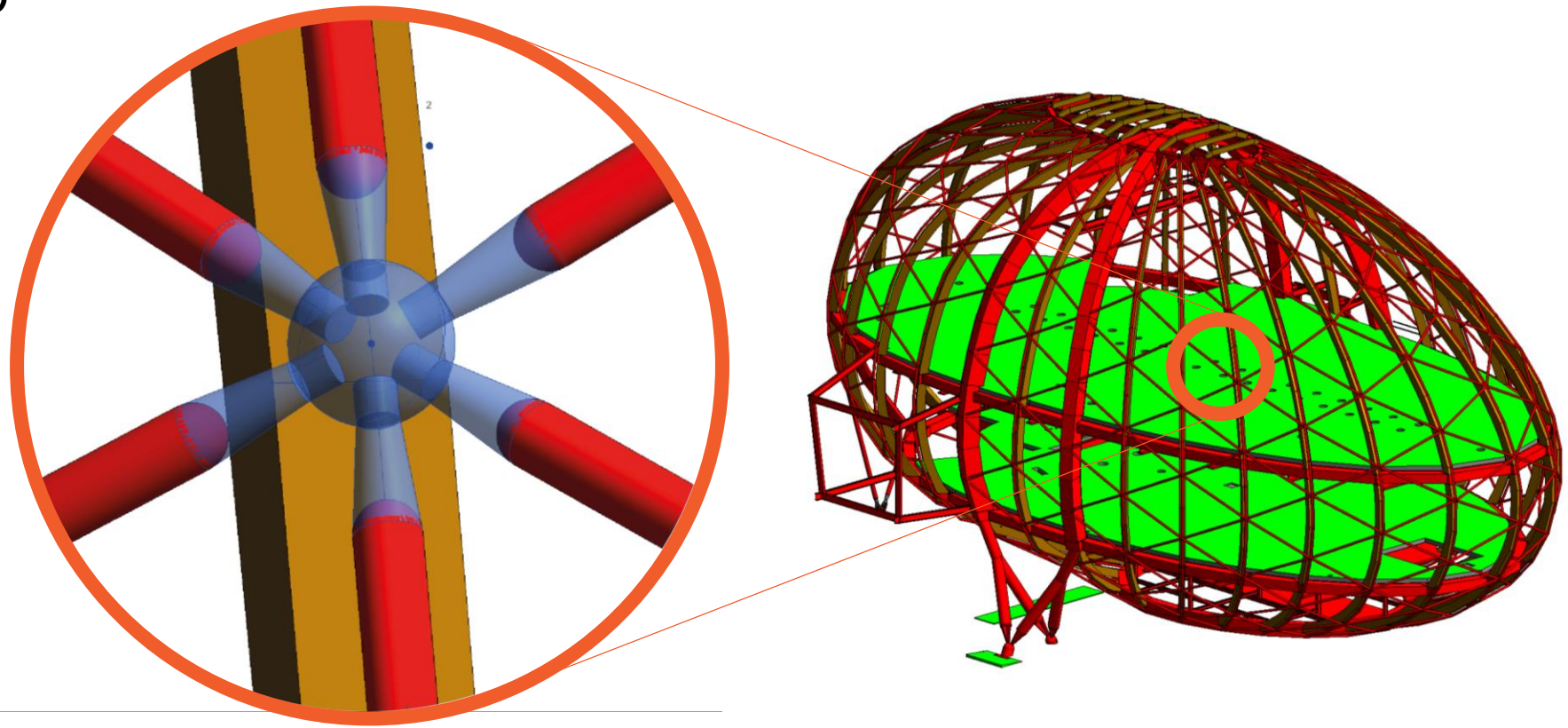
OVERVIEW



Søren Jensen

DIGITAL WORKFLOW

REVIT - DYNAMO

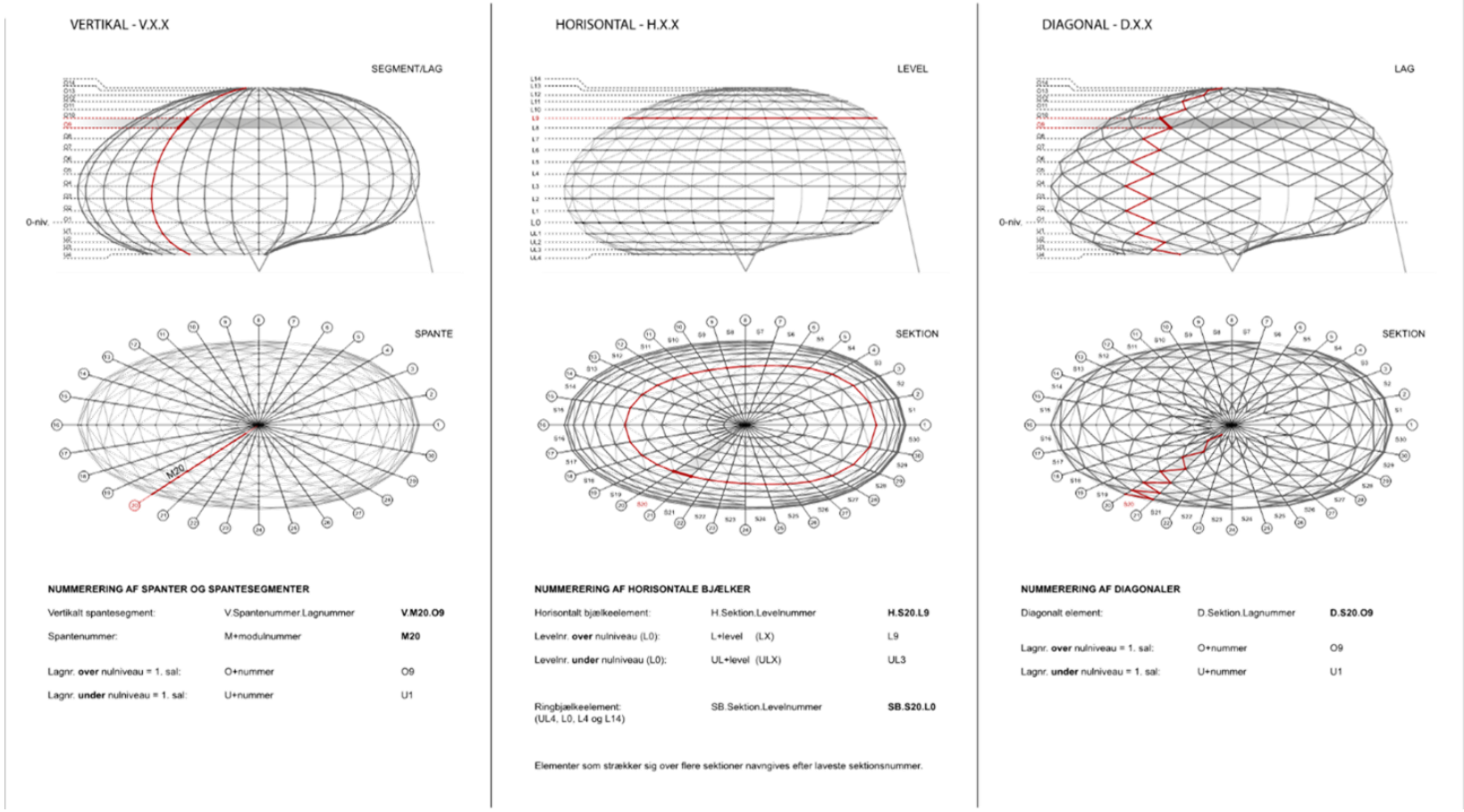


Søren Jensen

DIGITAL WORKFLOW

SYSTEMIZED DATA

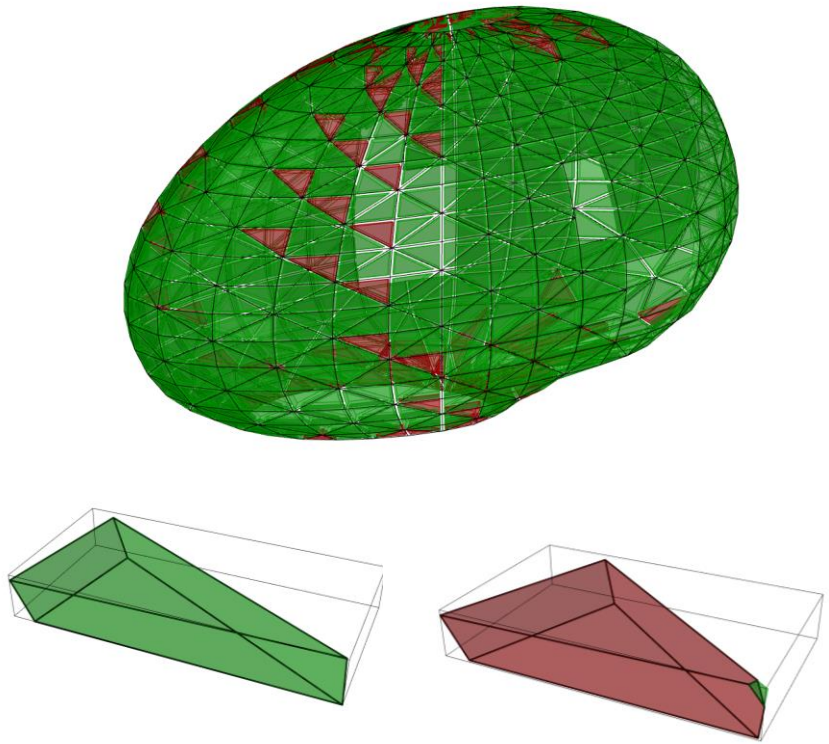
- NAMING

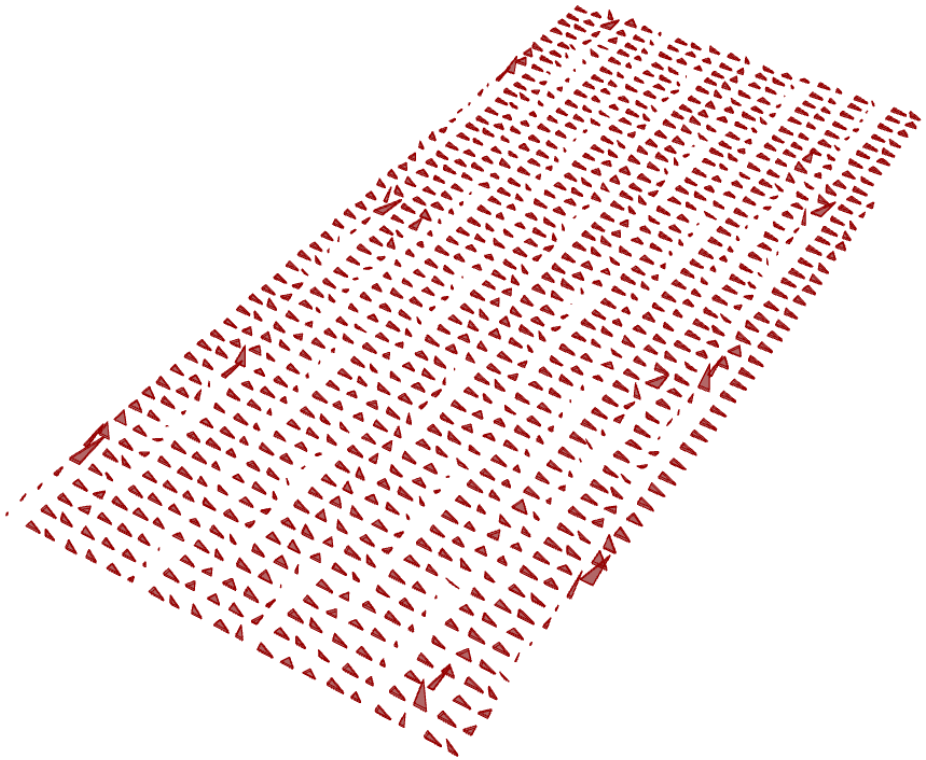


Søren Jensen

DIGITAL WORKFLOW

STUDIES – FAÇADE|BUILDABILITY



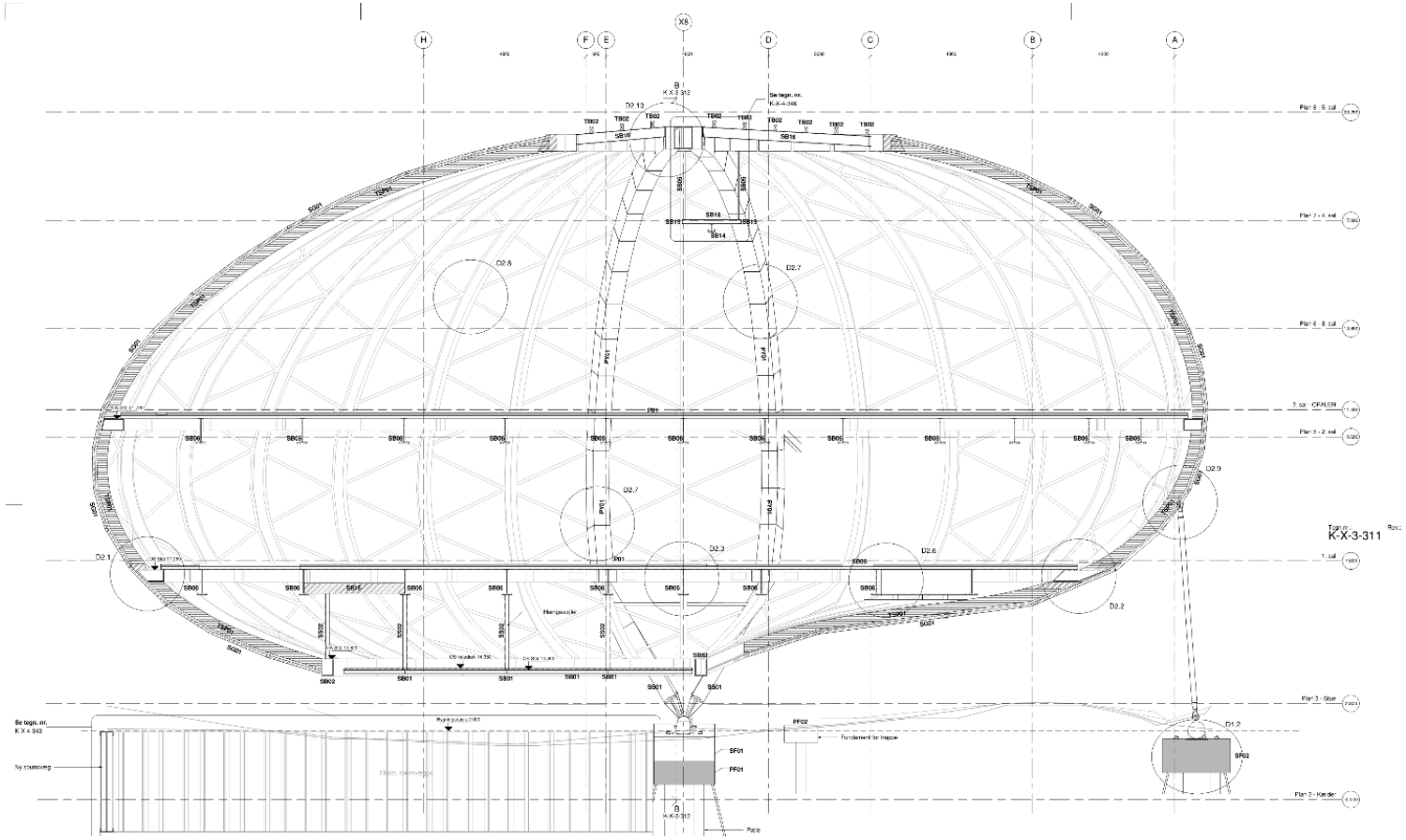


Søren Jensen

CONCLUSION

System

- Central script
- Discipline specific scripts



Advantages

-Linked reference geometry

-Parametric models across disciplines

-Iterative design process

-Stop / Go option

Søren Jensen