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Mathieu VENOT

*[Naval] || {Computation} || Architecture*



**Mathieu VENOT**

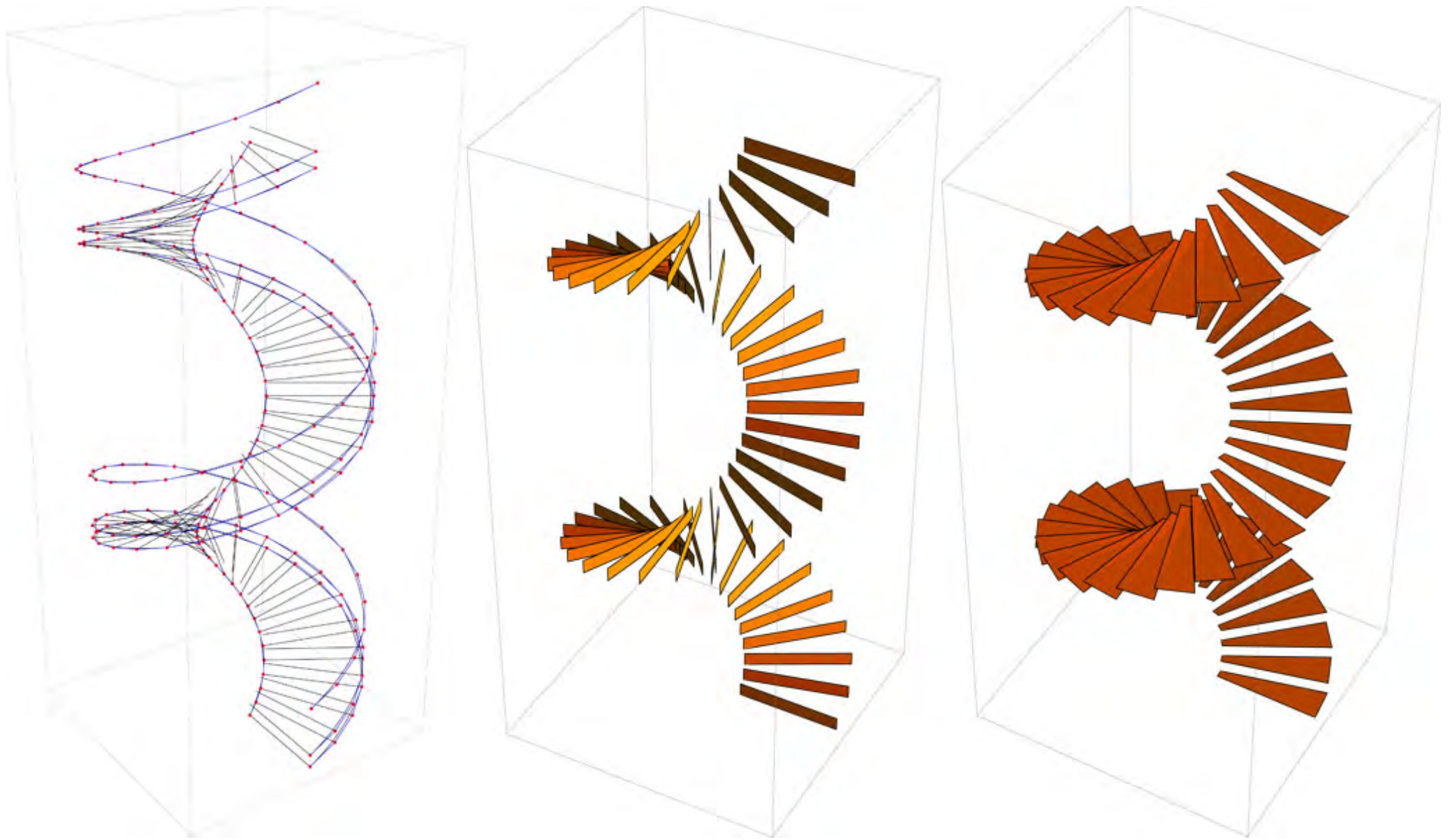
1 Allée Murillo  
44300 Nantes FRANCE

+336 79 33 64 10  
[contact@mathieuvenot.com](mailto:contact@mathieuvenot.com)

*Naval Architect Engineer, MSc  
Born September 30, 1990*

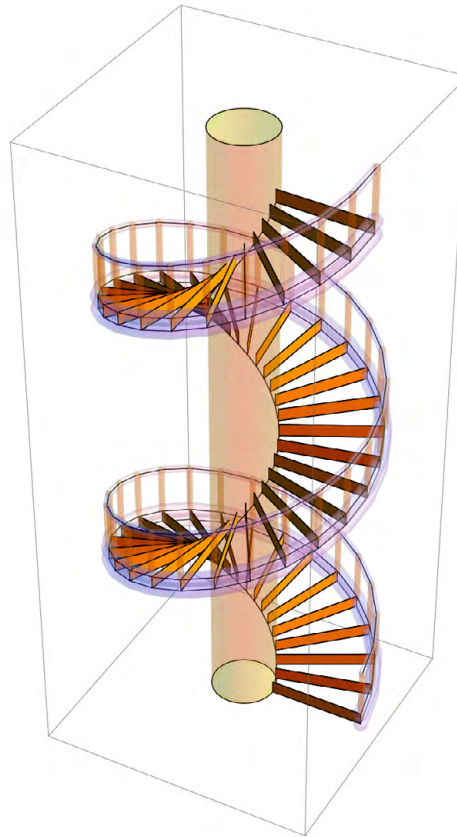
Experience  
Education

05/2013 - Now	▲	Mathieu Venot : Naval Architect Engineer
12/2018 - Now	▲	L2O Naval : Naval Engineer
10/2015 - 03/2019	▲	Dixie Lab : Co-founder
09/2018	▲	ENSTA Bretagne : Naval Architect Engineer, MSc
04/2018 - 08/2018	▲	ENSTA Bretagne : Intern
09/2017	▲	DMS2017 : Workshop leader
03/2017	▲	ESBAM : Workshop leader
09/2015 - 02/2017	▲	ENSAPM : Workshop leader
10/2016 - 01/2017	▲	ENSAM - ENSCI Les Ateliers : Studio tutor
11/2016	▲	Dixie Lab : DixieVR publication
09/2016	▲	AAG2016 : Workshop leader
09/2016	▲	ENSAPM : Master thesis publication
09/2013 - 09/2016	▲	ENSAPM : Studio & Workshop tutor
06/2016	▲	ENSAPM : Architect, MArch
07/2013	▲	EZCT : Intern
07/2011	▲	Port Napoleon : Intern

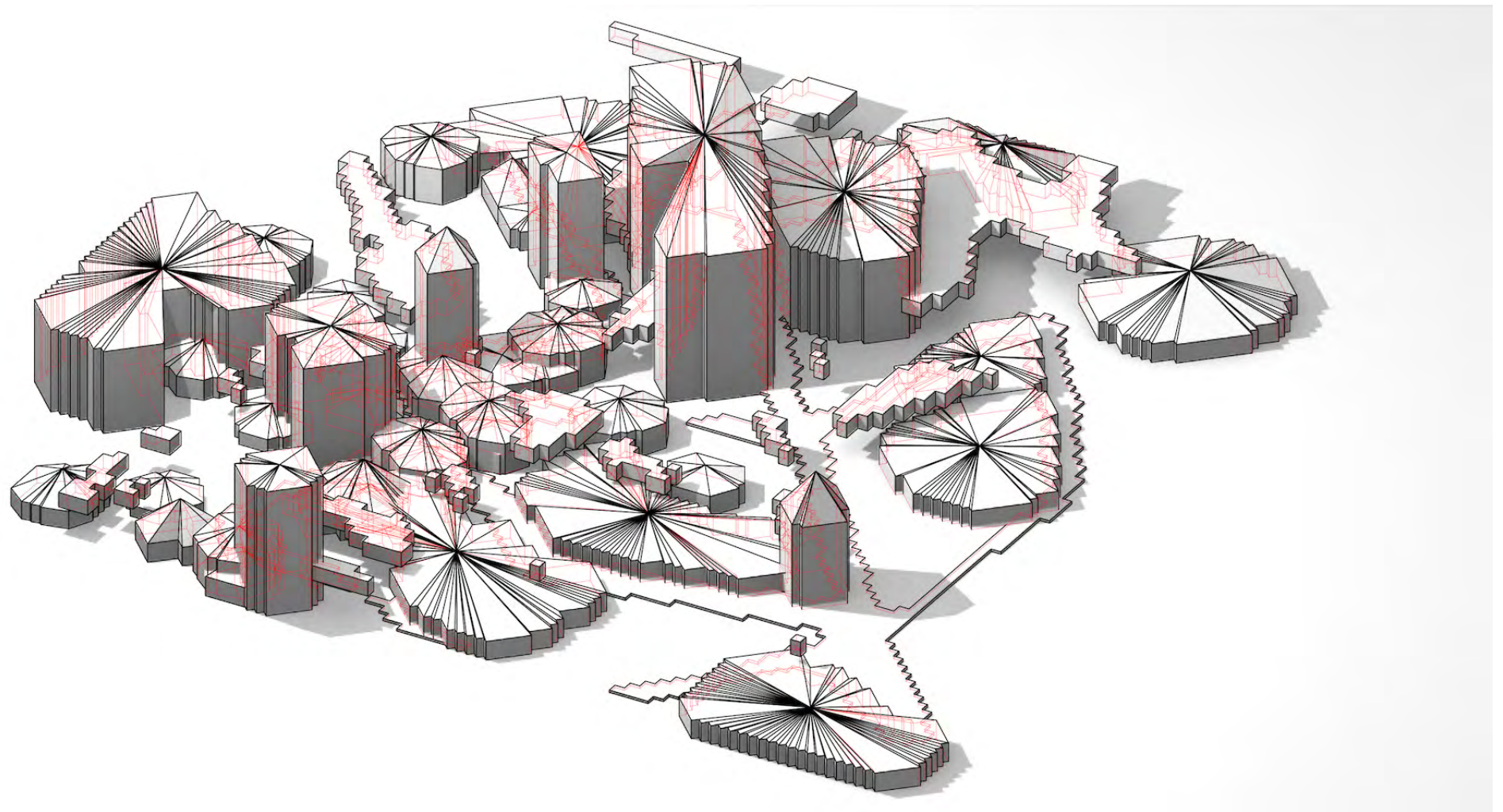


Mathematical programming  
*Helicoidal stair construction by mathematical operations*  
[Academic]

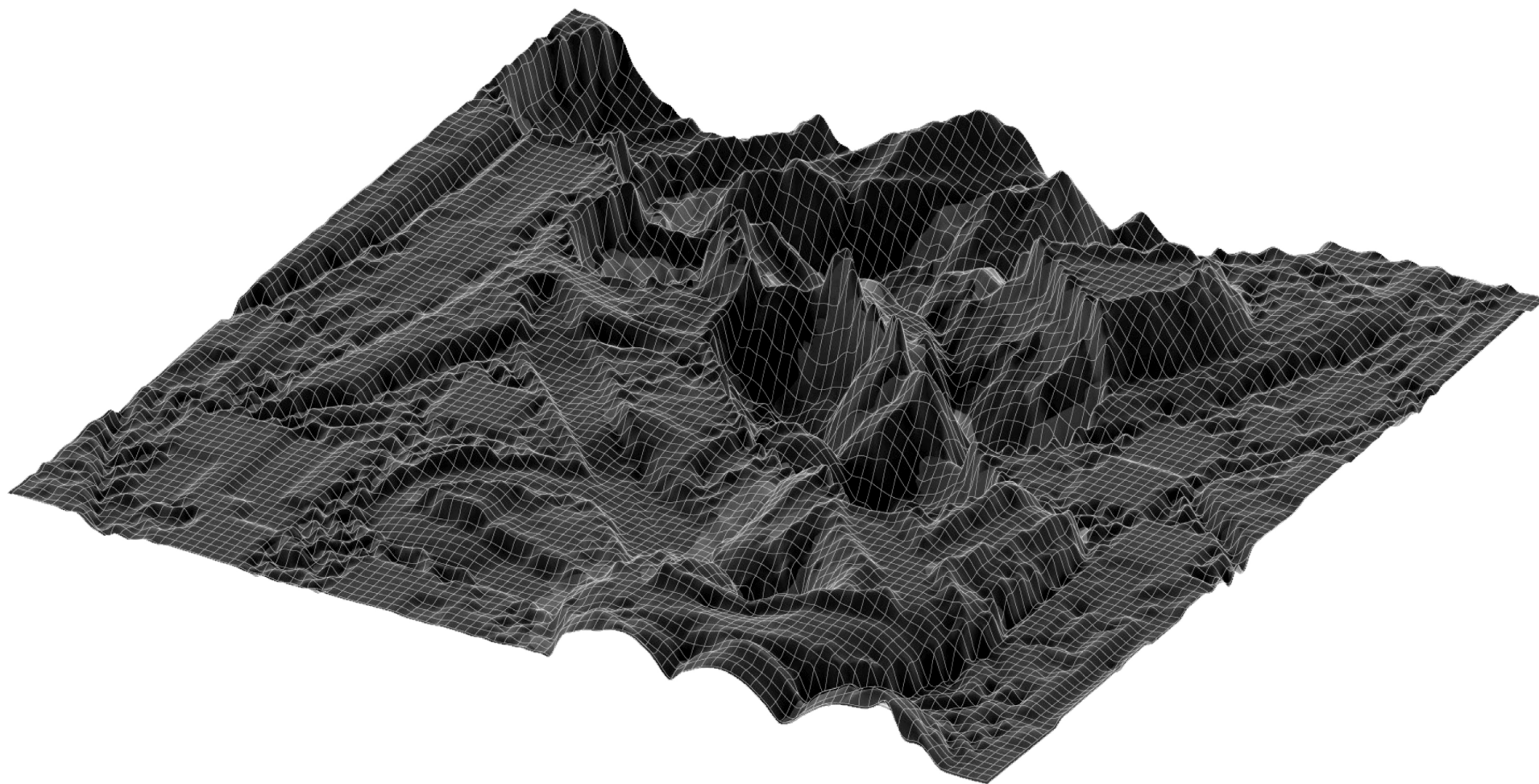
```
Show[{nonbezier1, nonbezier2, ligneh, lignehnez, tube, lignegarde,
      lignemarche, tubegarde, surfcm, tubemarche, tubeext, barriere}]
```

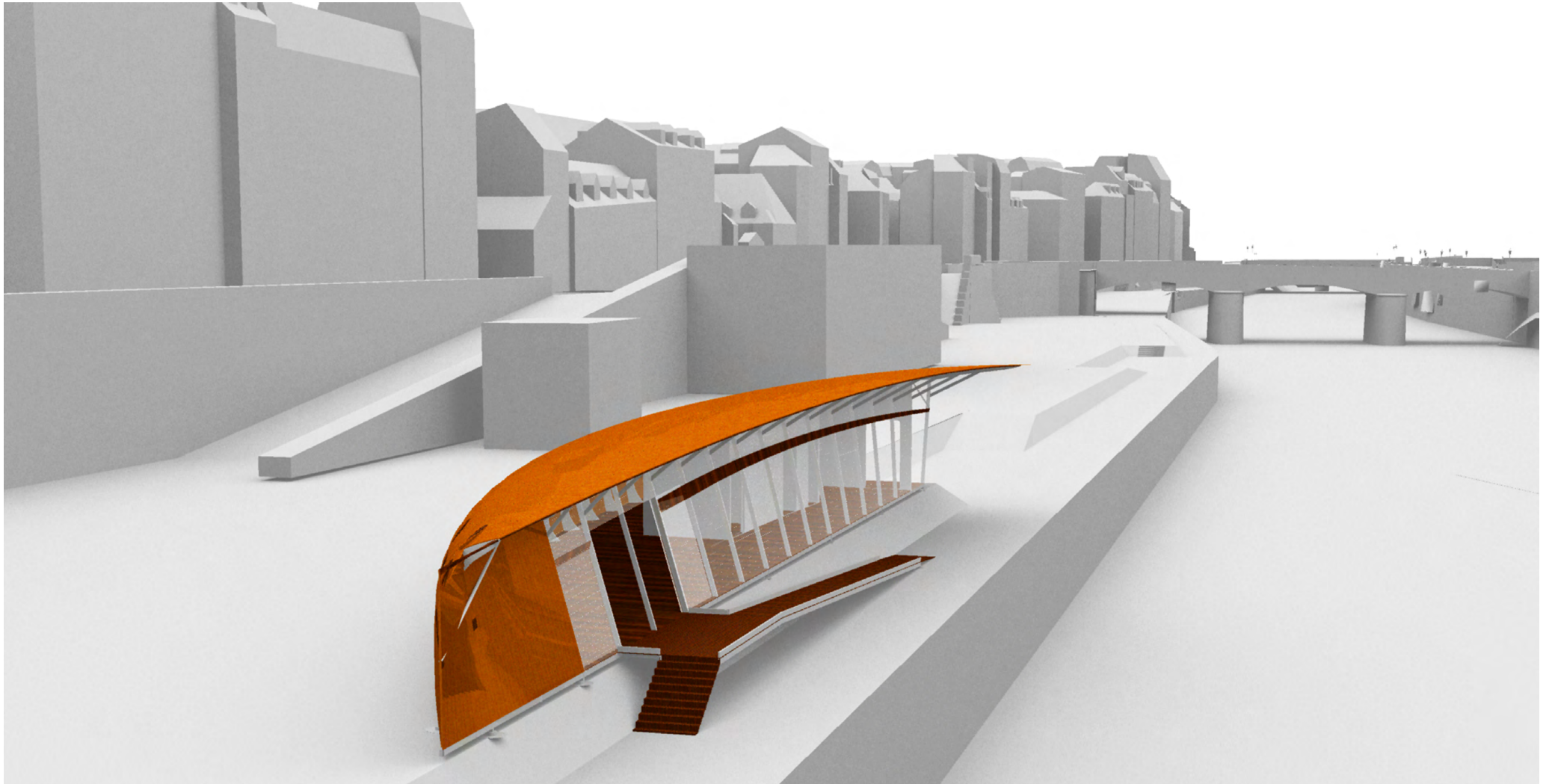


```
pointsSurfMarche1 =
  Table[{ptsMarchesIntOK1[[i, j]], ptsMarchesExtOK1[[i, j]], ptsMarchesExtOK1[[
    i, j + 1]], ptsMarchesIntOK1[[i, j + 1]], ptsMarchesIntOK1[[i, j]]},
    {i, 1, Length[ptsMarchesIntOK1]}, {j, 1, Length[ptsMarchesExtOK1[1]]}];
surfmarcheOk1 = Delete[Map[Polygon, pointsSurfMarche1, {2}], -1];
```

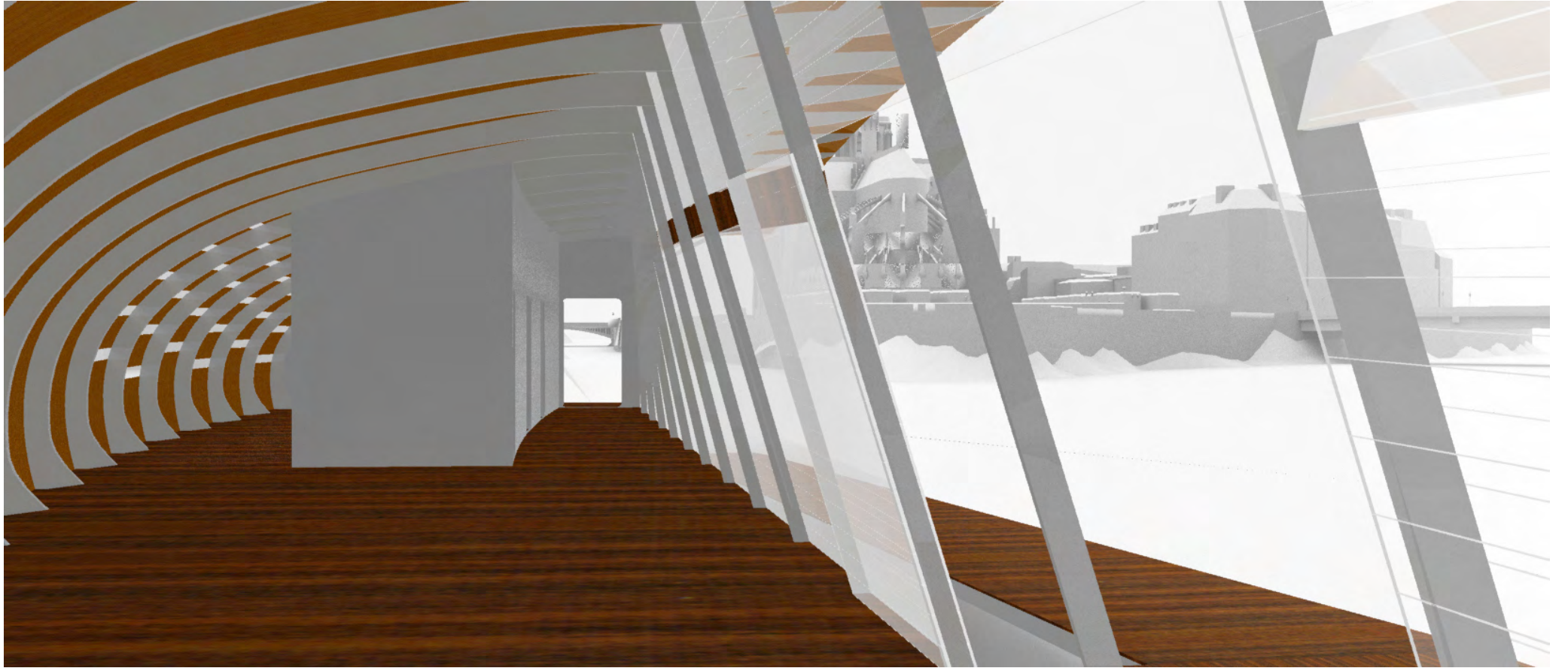


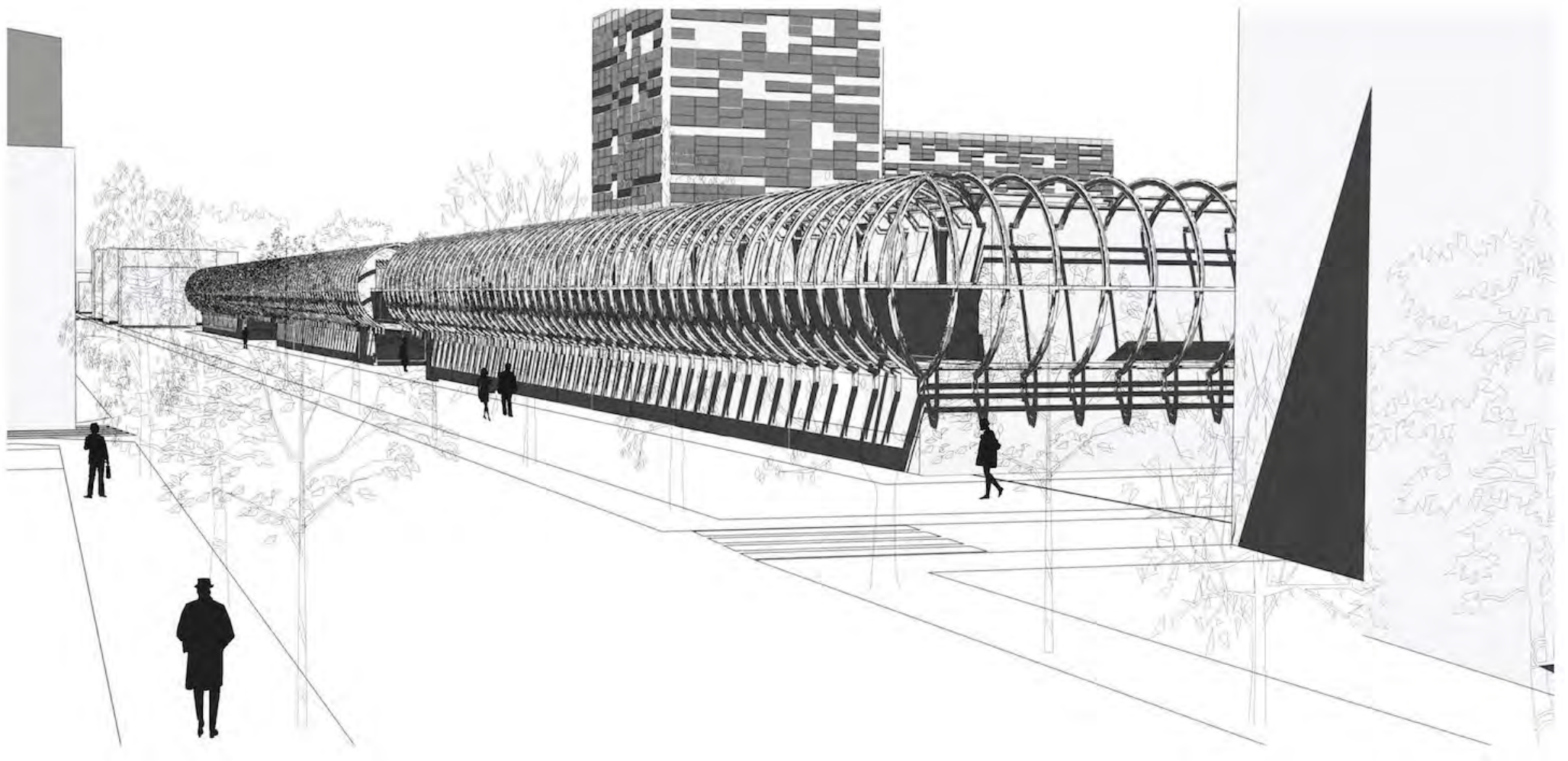
Generative Landscapes  
Shape and color detection for procedural generation  
[Academic]



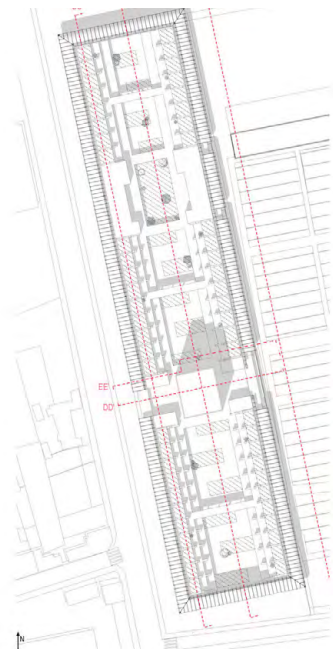


*Structural Station Cover*  
*Boat station parametric design*  
*[Academic]*





Factory Rehab  
*Rehabilitation of the Ivry's water treatment factory into students complex and housing*  
*[Academic]*



PLAN DE TOITURE AVEC POSITIONS DES SECTIONS - AA - ÉCHELLE 1:500



PLAN DU REZ-DE-CHAUSSEE - RA - ÉCHELLE 1:500



PLAN DU PREMIER ÉTAGE - RB - ÉCHELLE 1:500



PLAN DU DEUXIÈME ÉTAGE - RC - ÉCHELLE 1:500



TYPE 1



TYPE 2



TYPE 3



TYPE 4

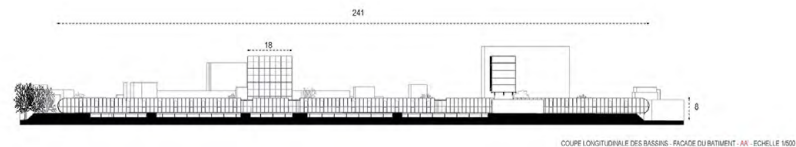


TYPE 5



TYPE 6

SIX TYPOLOGIES DIFFÉRENTES D'APPARTEMENTS



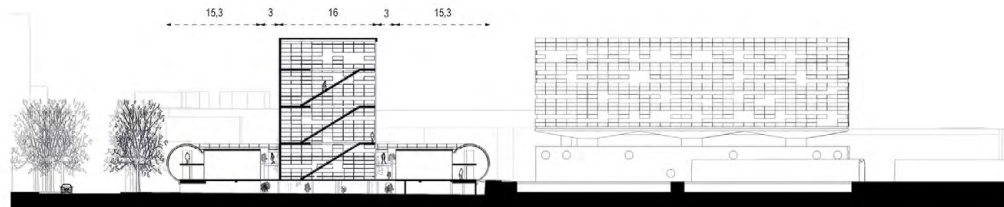
COUPE LONGITUDINALE DES BASSINS - FACADE ORIENTALE - AA - ÉCHELLE 1:500



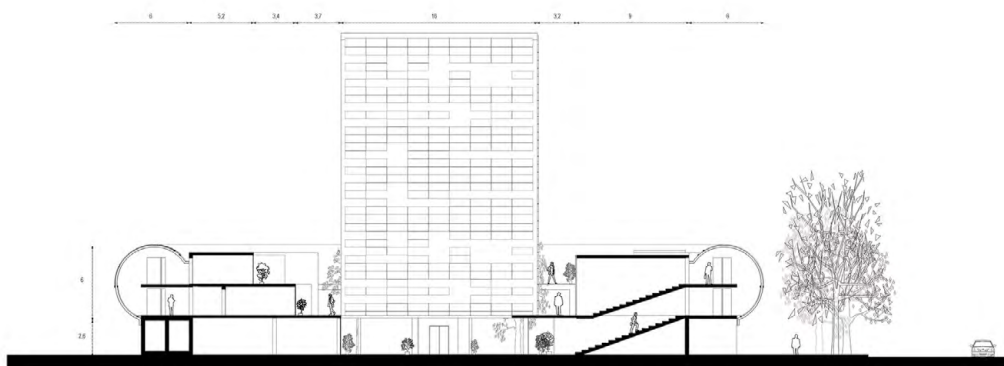
COUPE LONGITUDINALE DE LA BIBLIOTHÈQUE ET DE LA COUR INTÉRIEURE - BB - ÉCHELLE 1:500



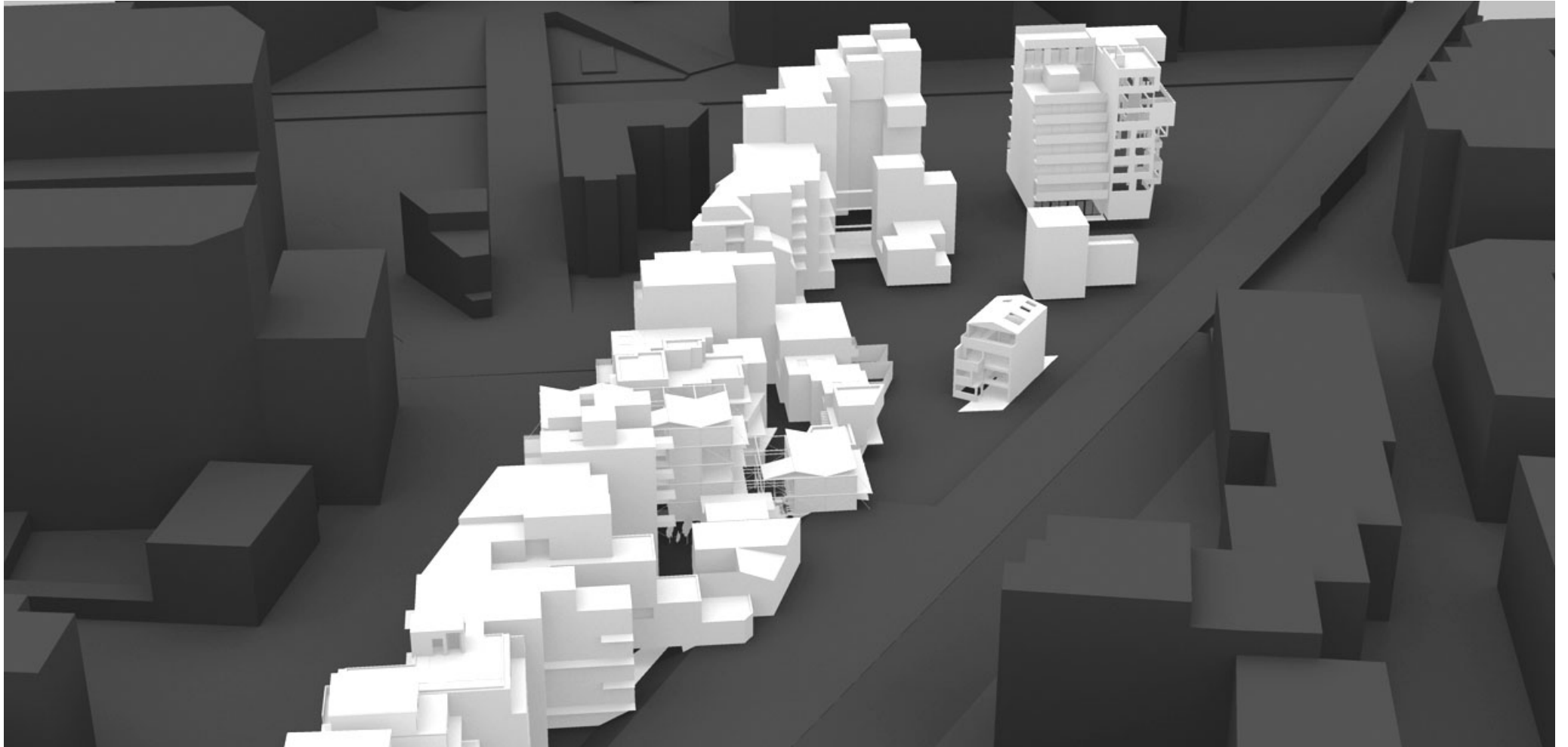
COUPE LONGITUDINALE DES LOGEMENTS - CC - ÉCHELLE 1:500



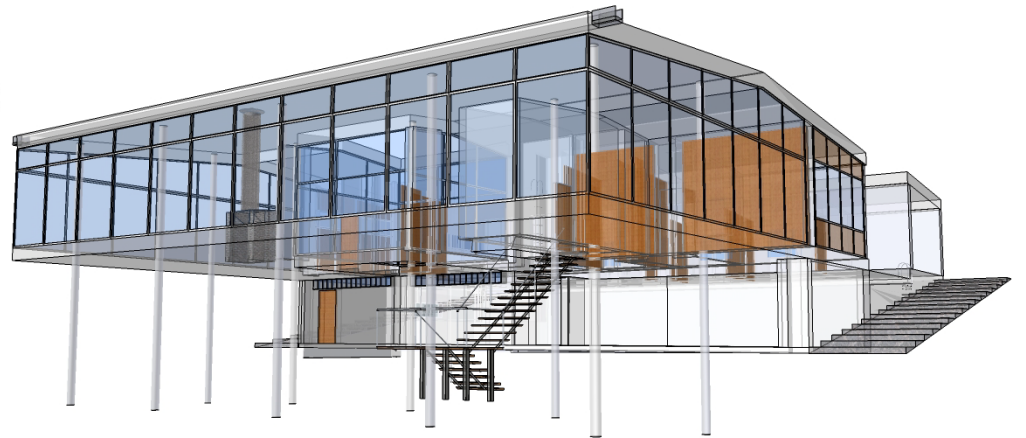
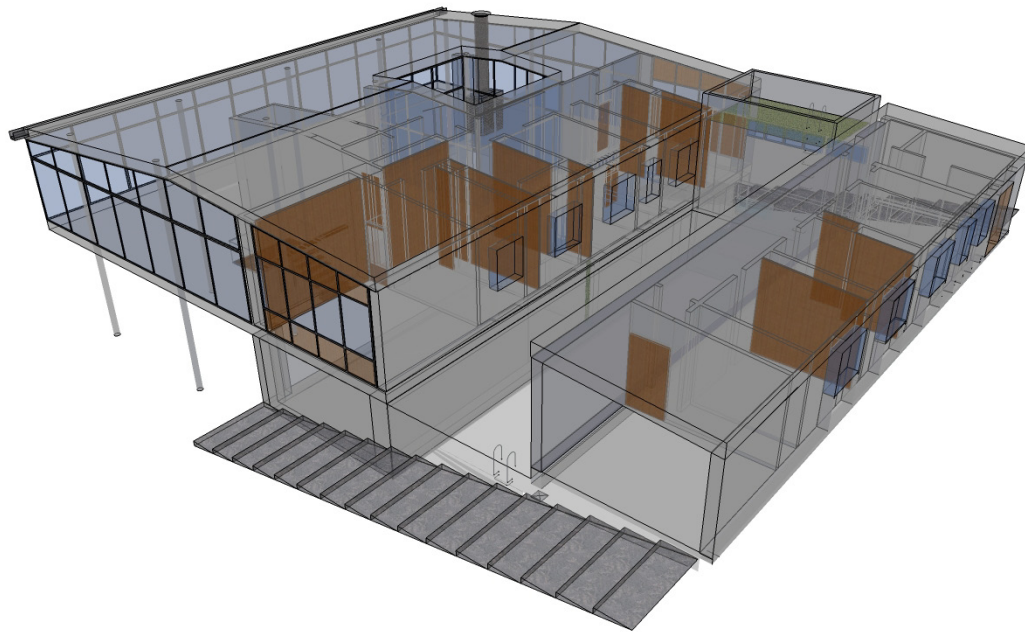
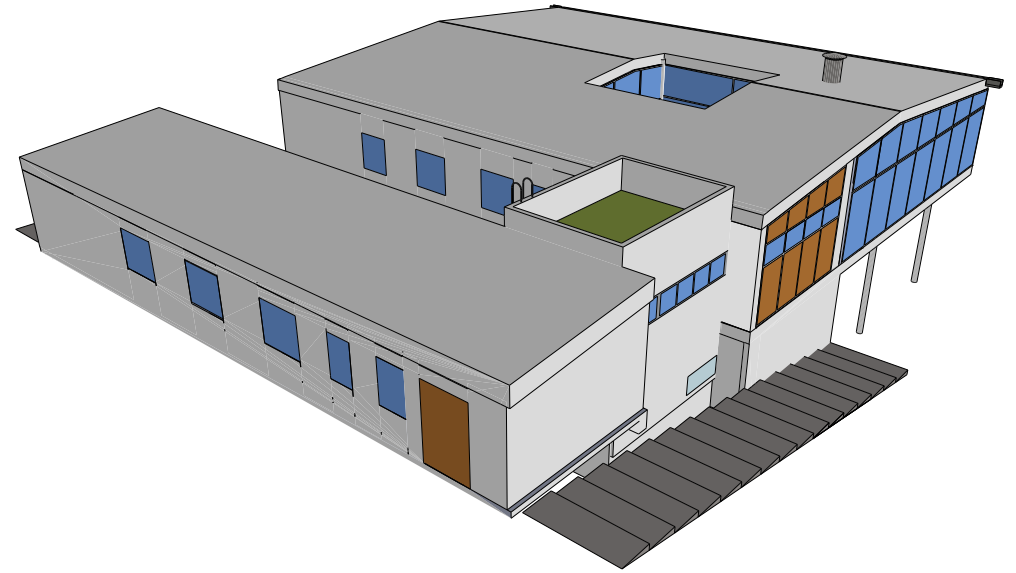
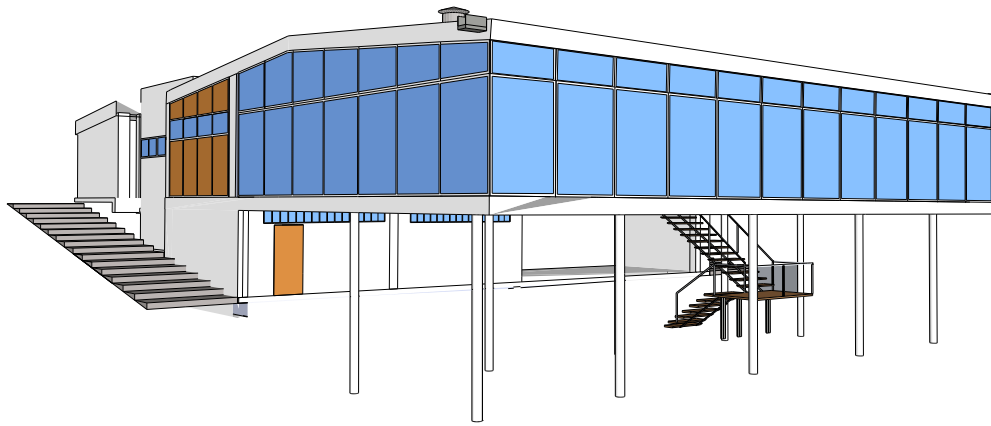
COUPE TRANSVERSALE DE LA BIBLIOTHÈQUE ET DUNE FAÏTTE - DD - ÉCHELLE 1:500

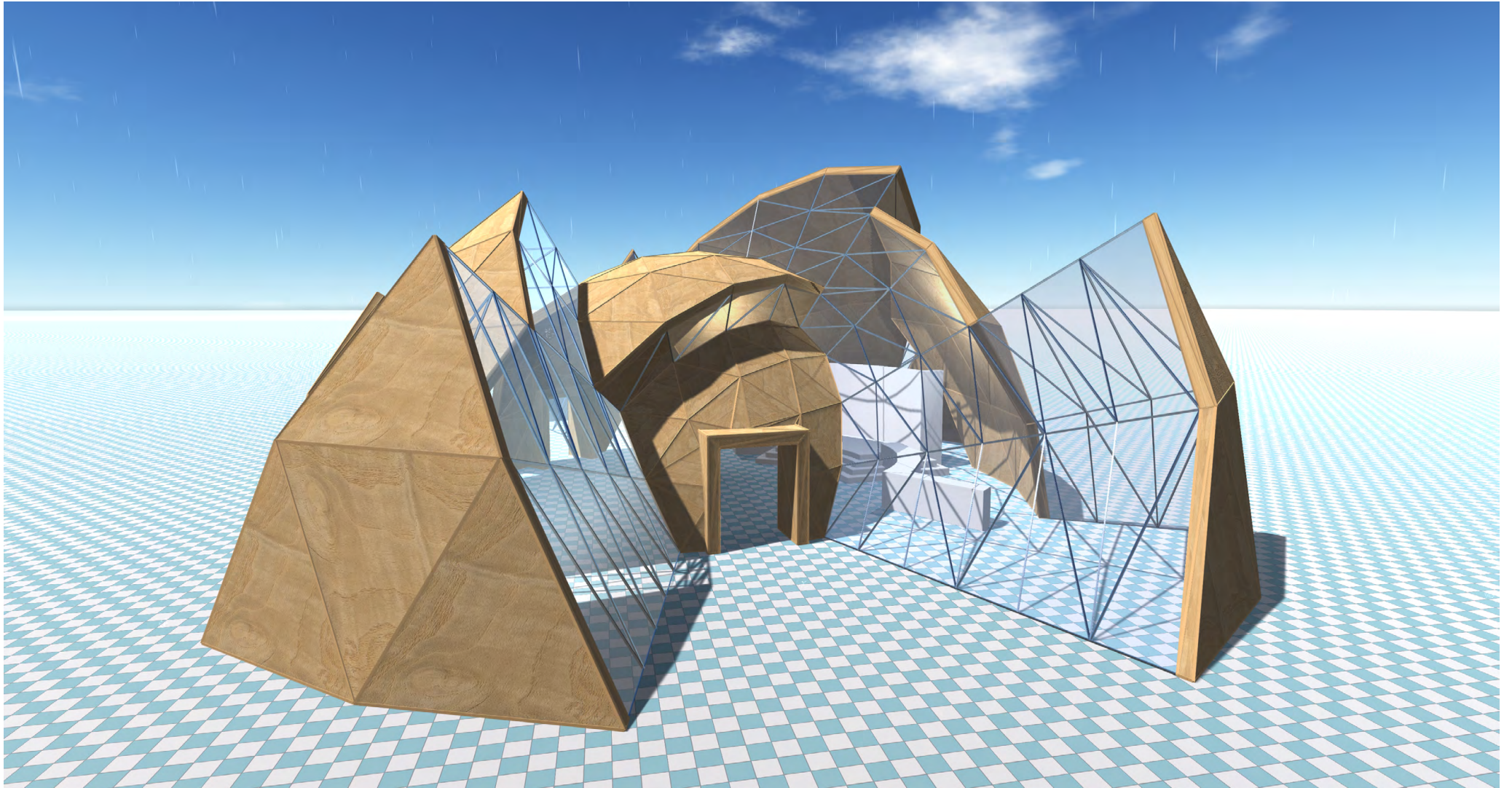


COUPE TRANSVERSALE EN CHAÎNE DES LOGEMENTS ET DUNE FAÏTTE - EE - ÉCHELLE 1:500

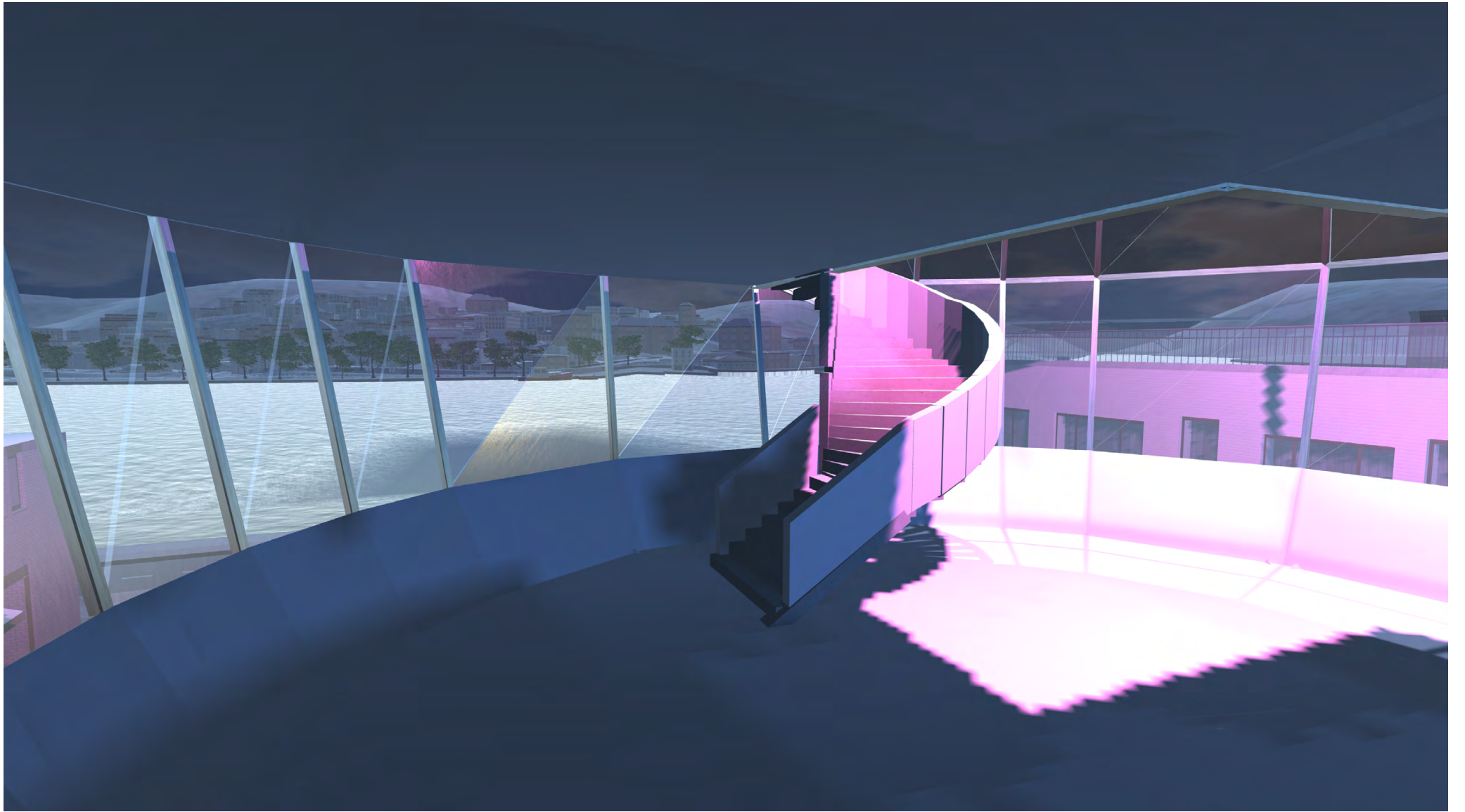


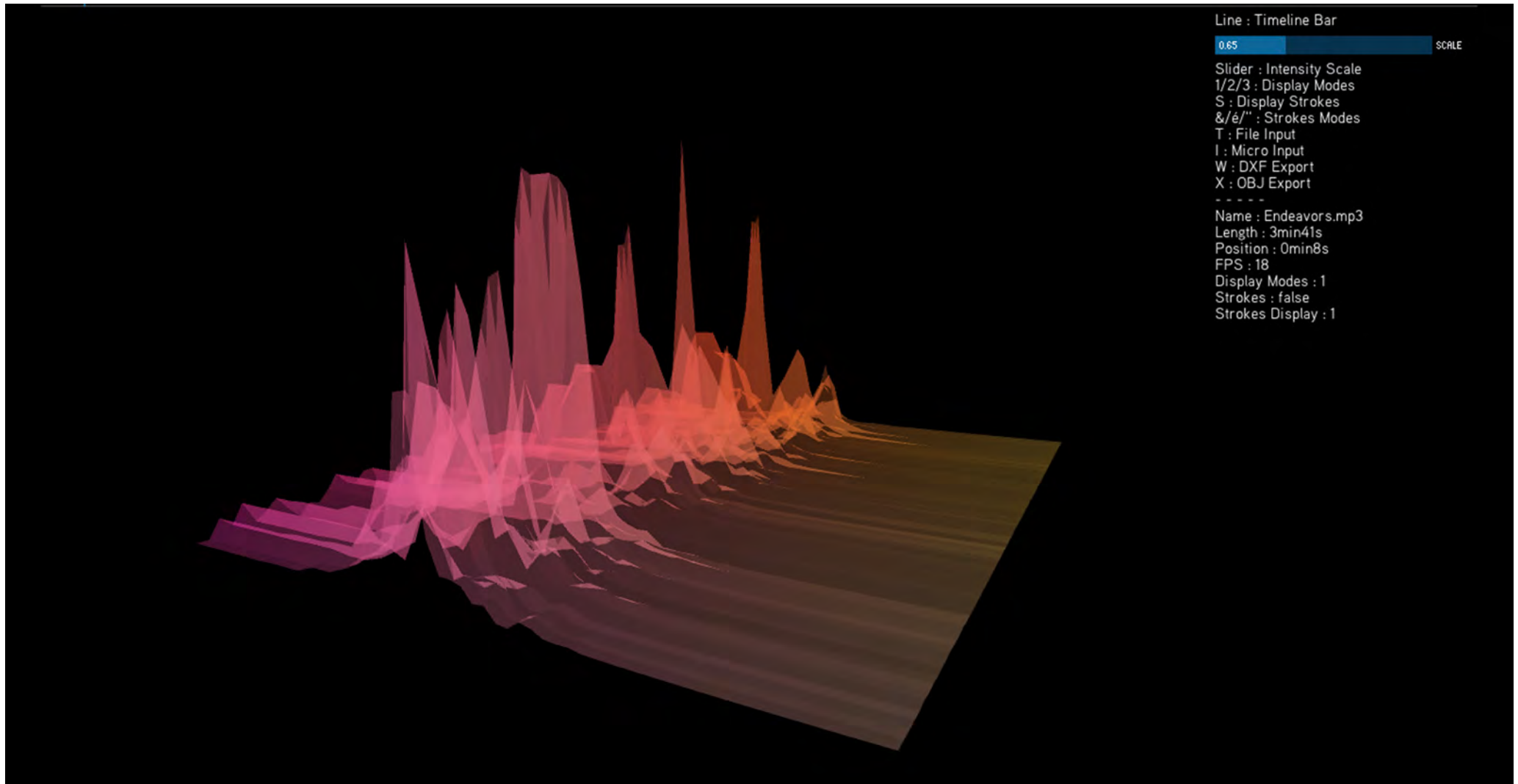
*Urban and Housing  
Program redefinition for Paris 19th district and housing analysis  
[Academic]*





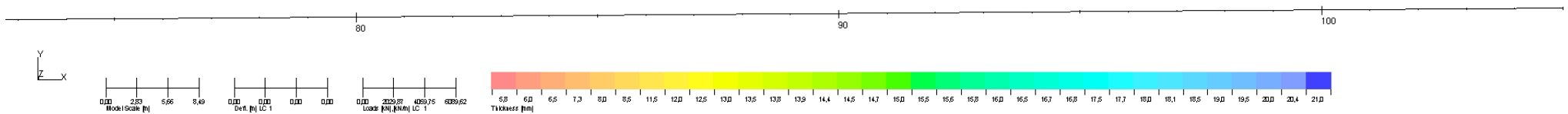
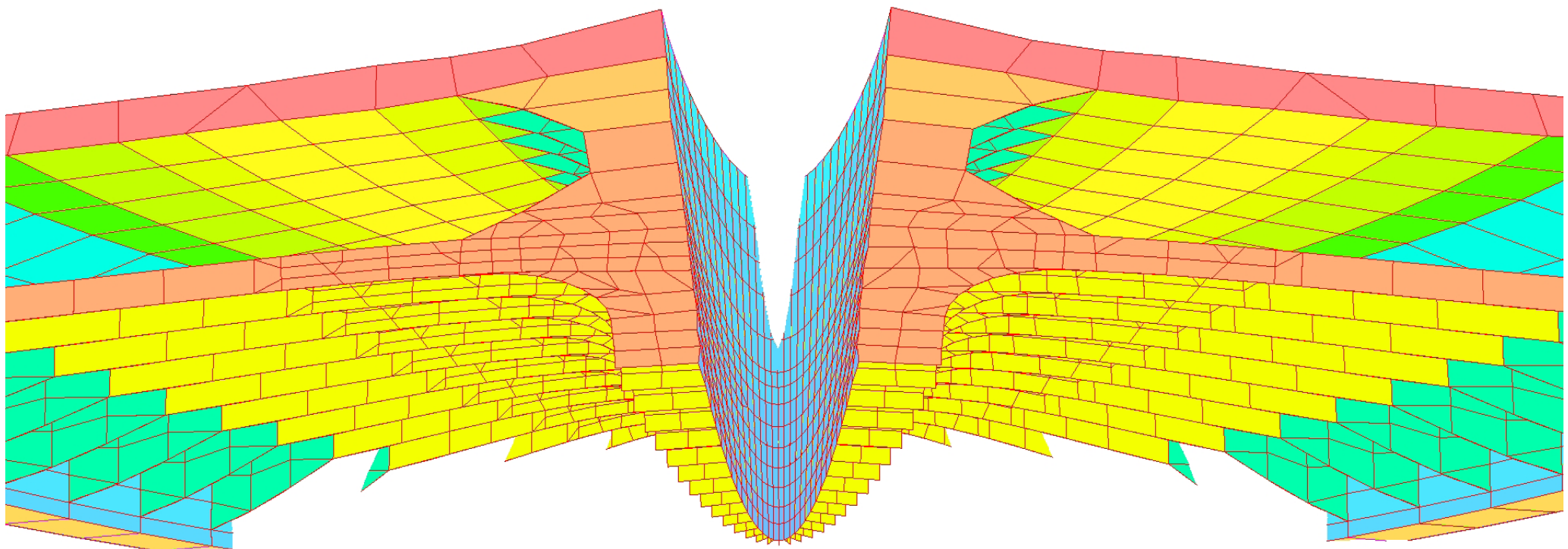
Virtual Reality Architectural Conception Software  
*Real-time immersive simulation, environment acquisition, interoperability and multi-user collaboration*  
[Academic]



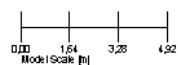
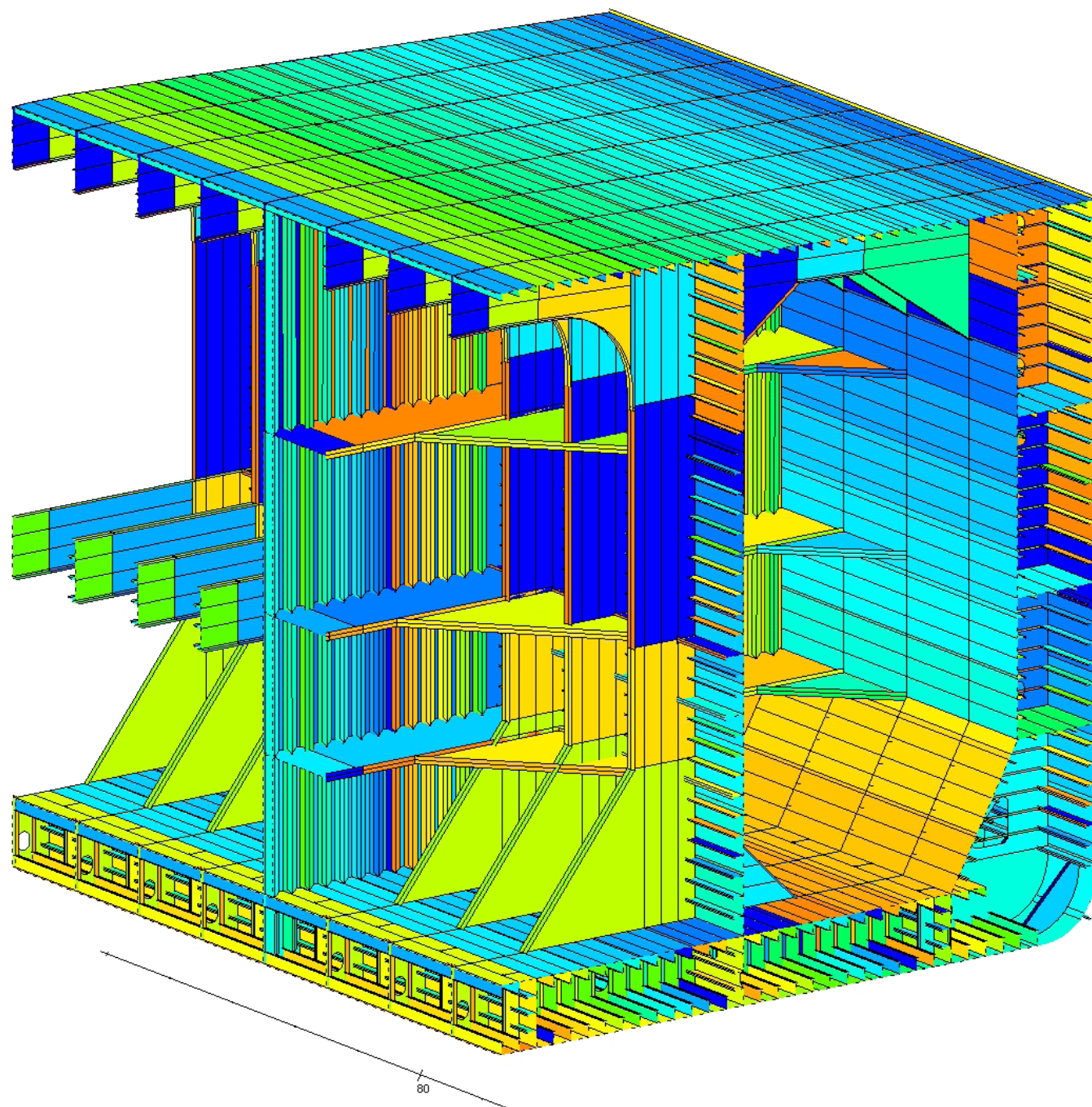


Sound Spectrum Materiality  
Sound analysis and extracting for 3D printing prototyping  
[Academic]

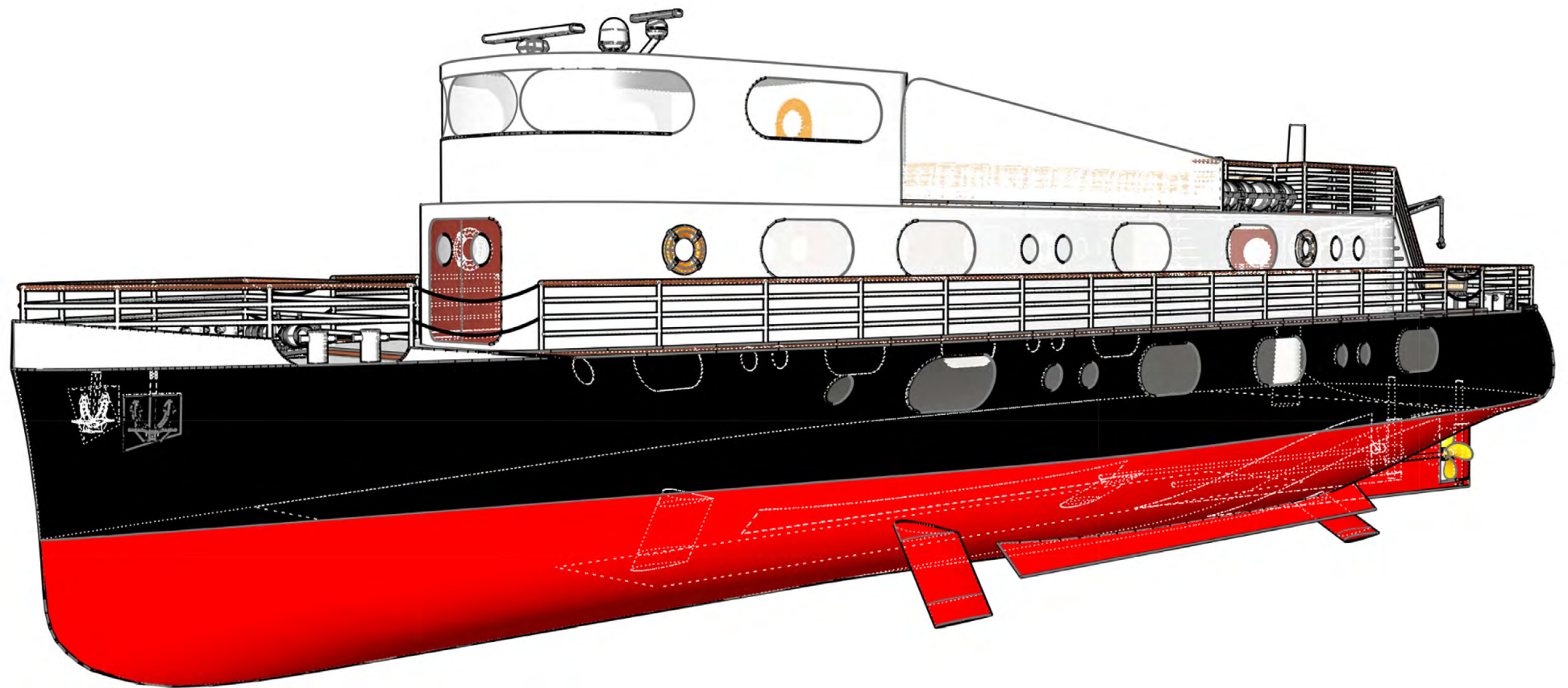




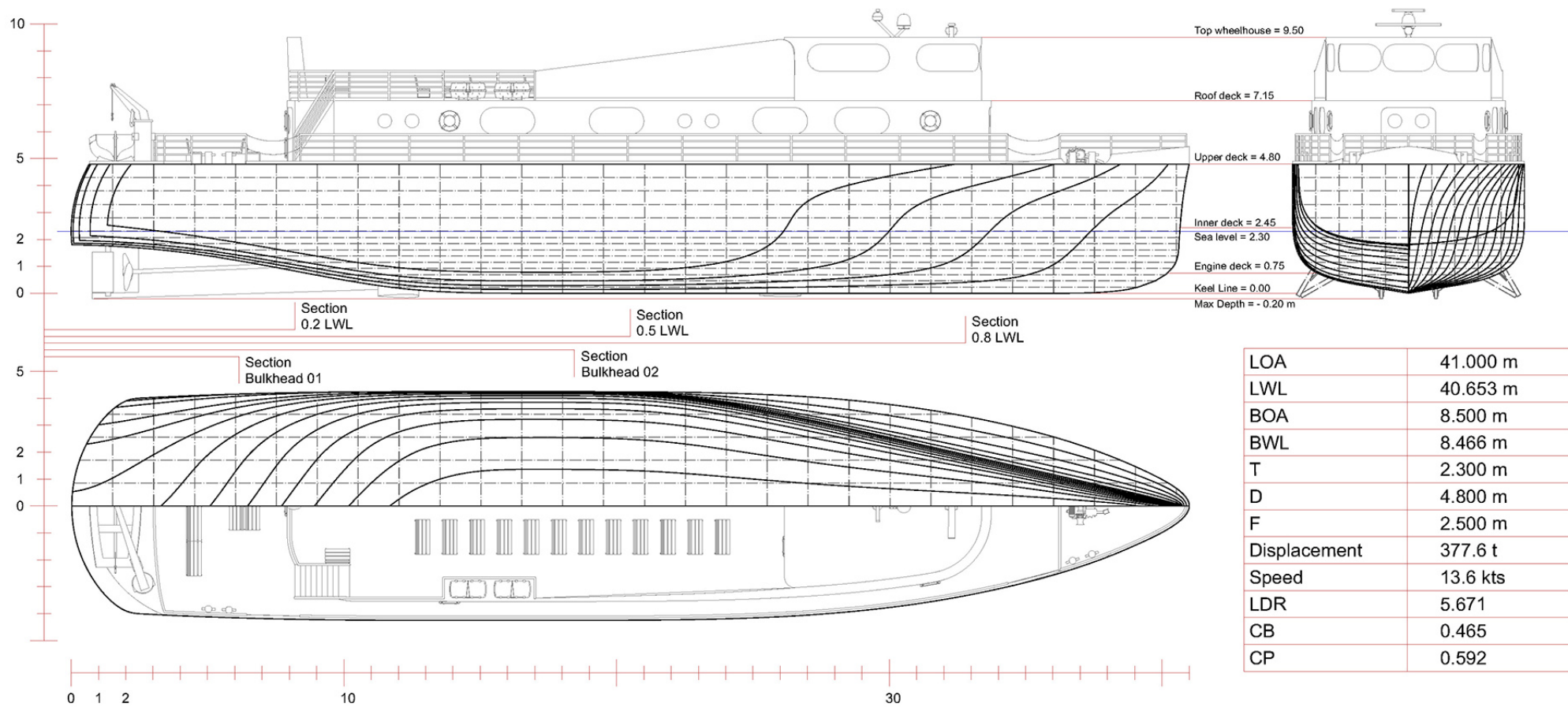
*Structure Lab*  
*Double Hull Bulk Carrier*  
*[Academic]*

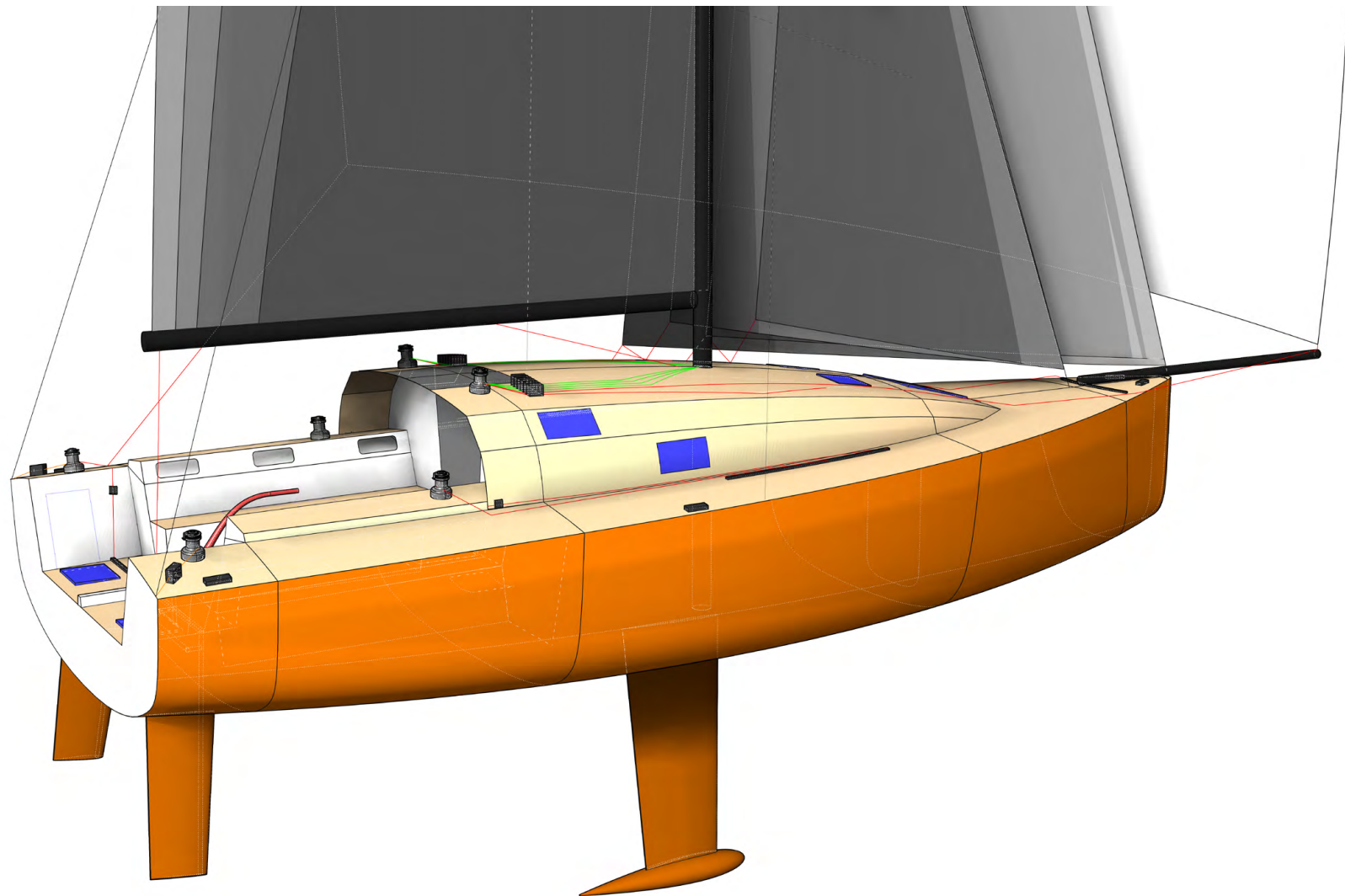


80

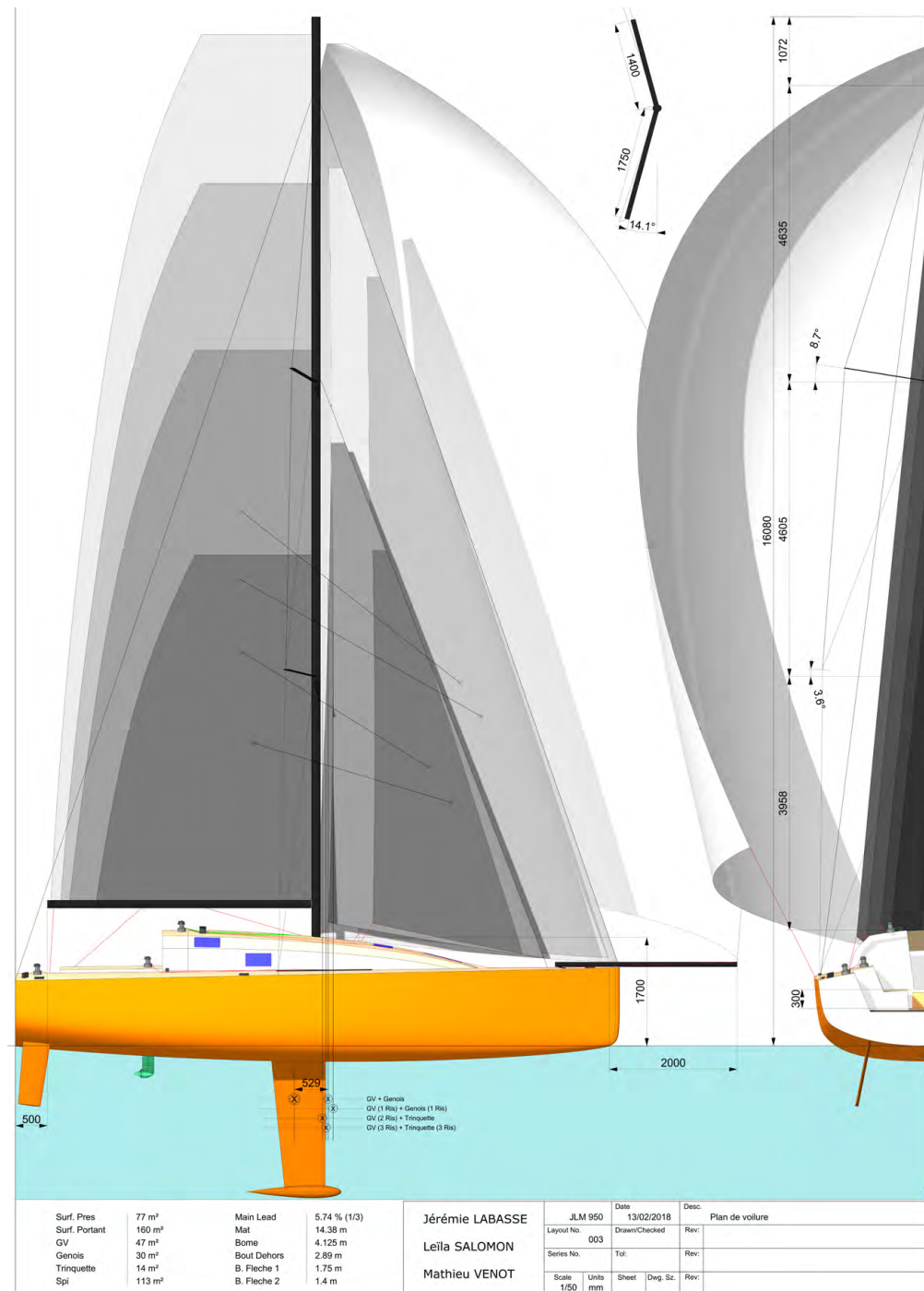
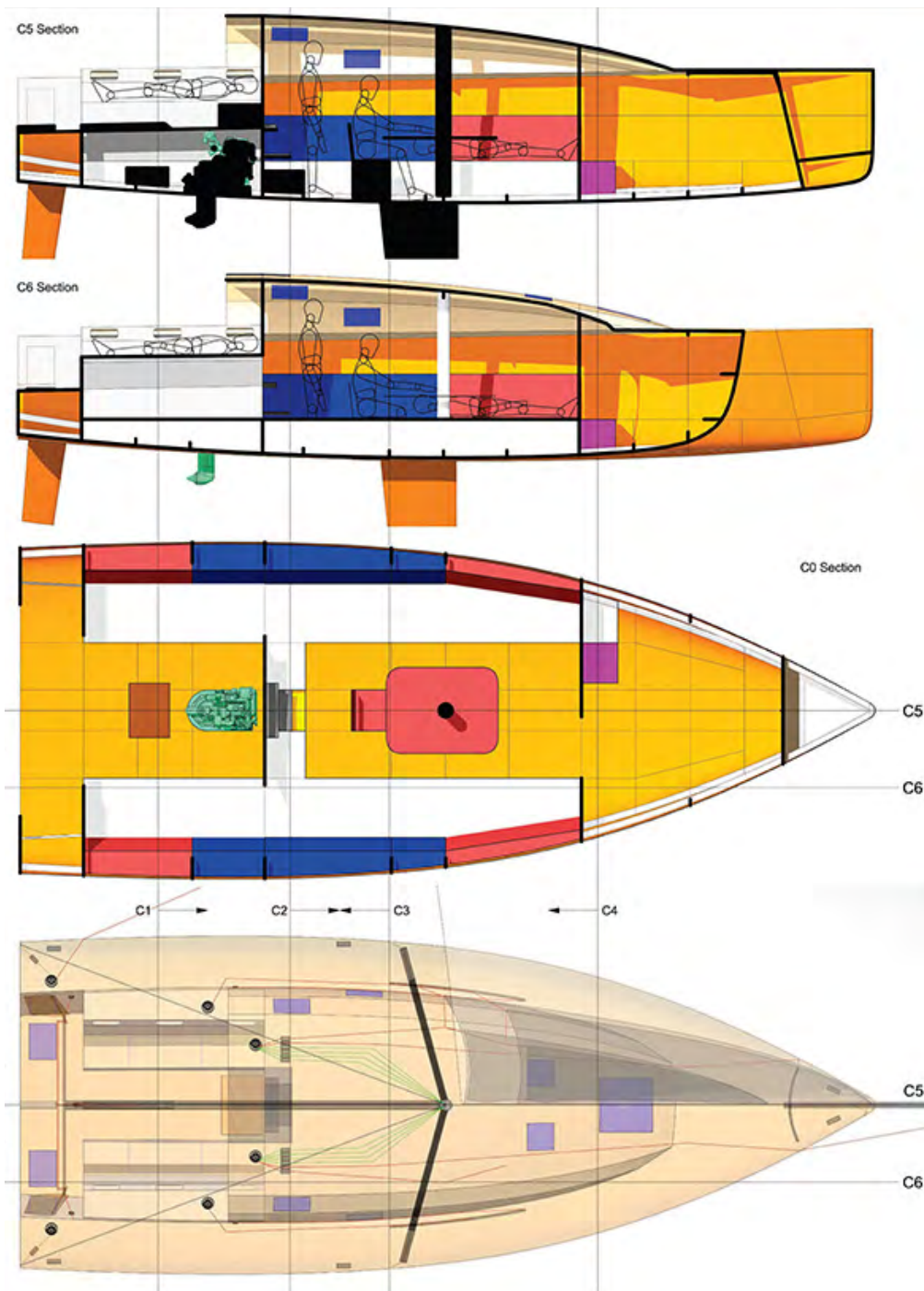


*Ships Design Loop*  
*Passenger Ship*  
*[Academic]*



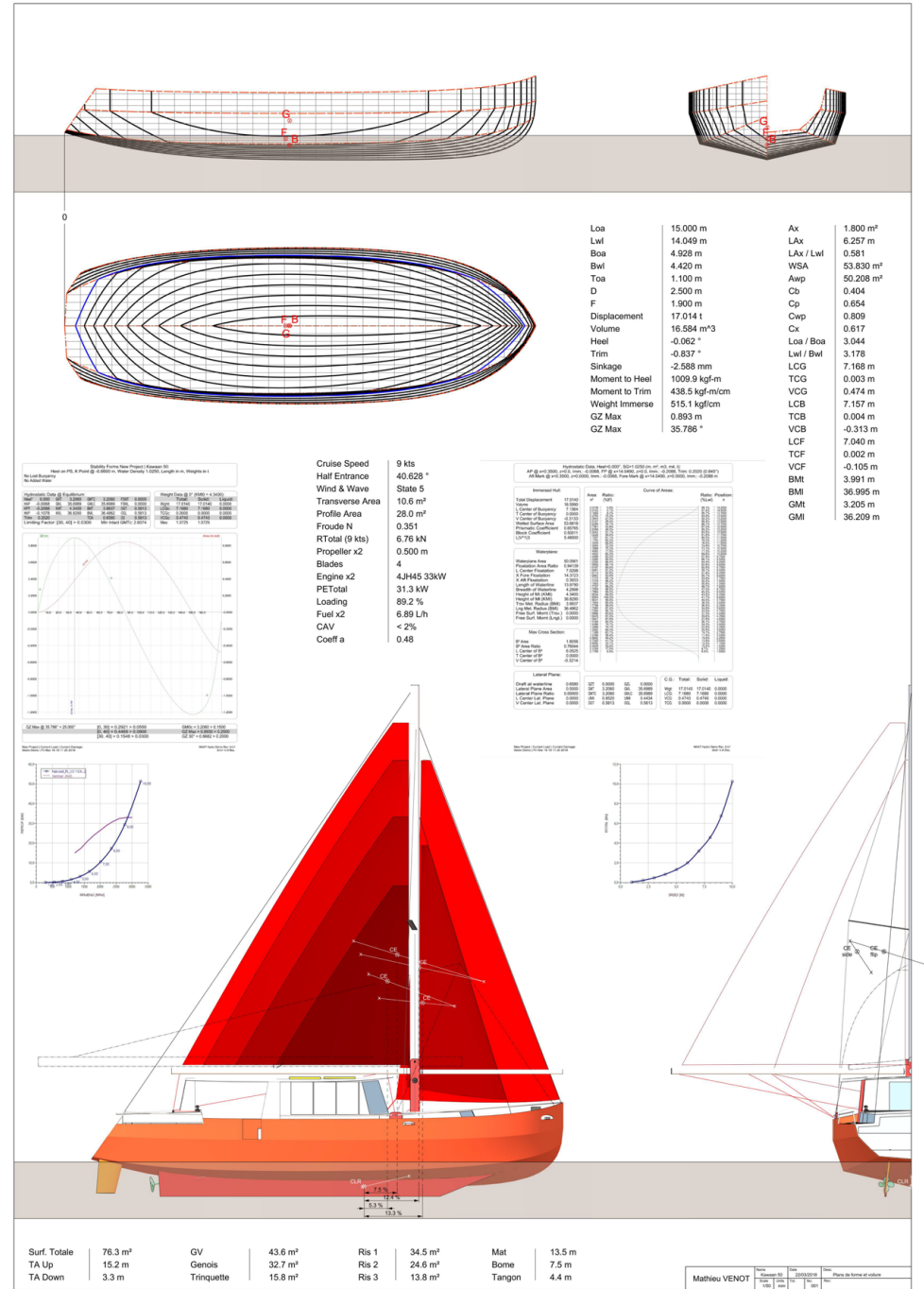
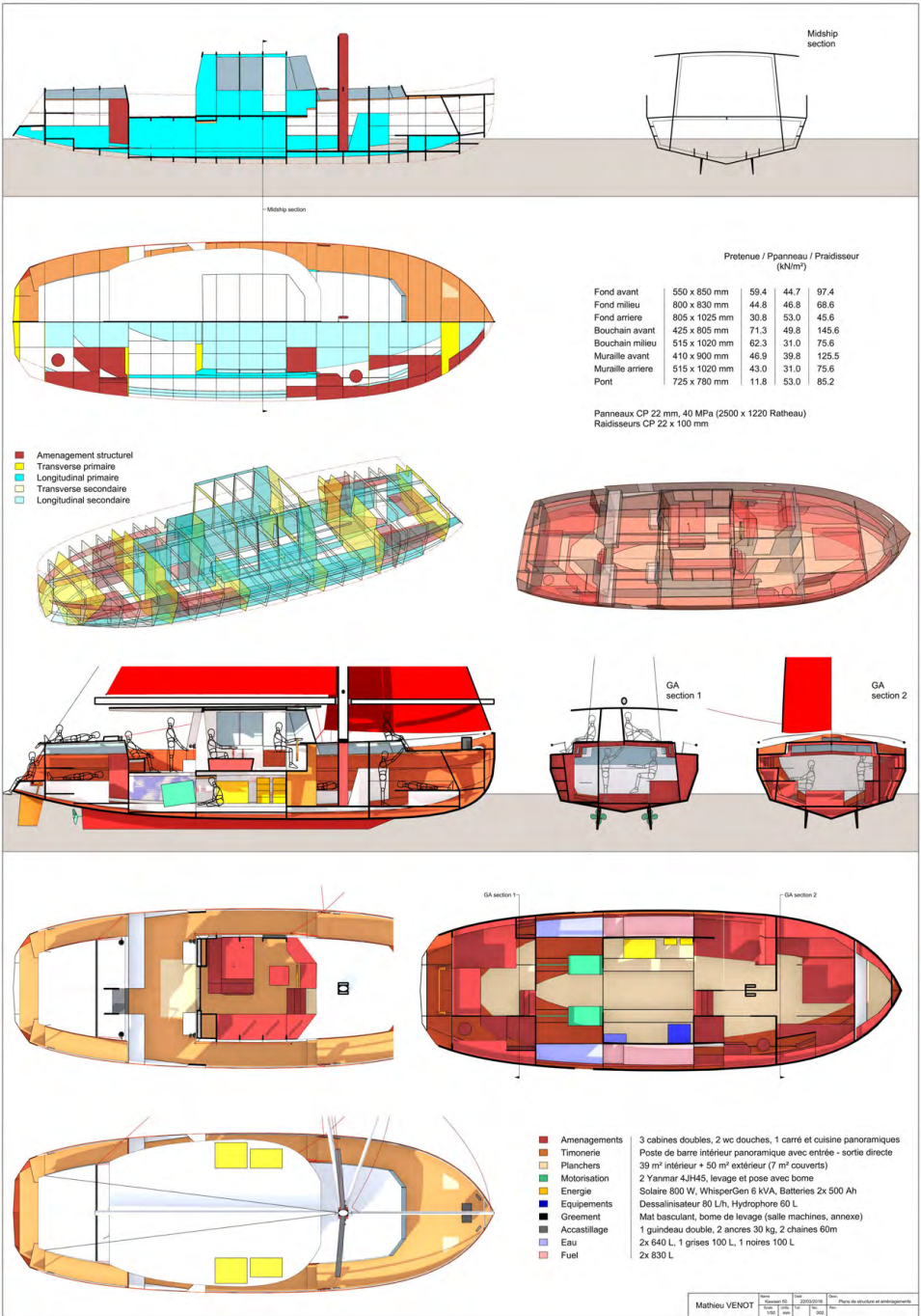


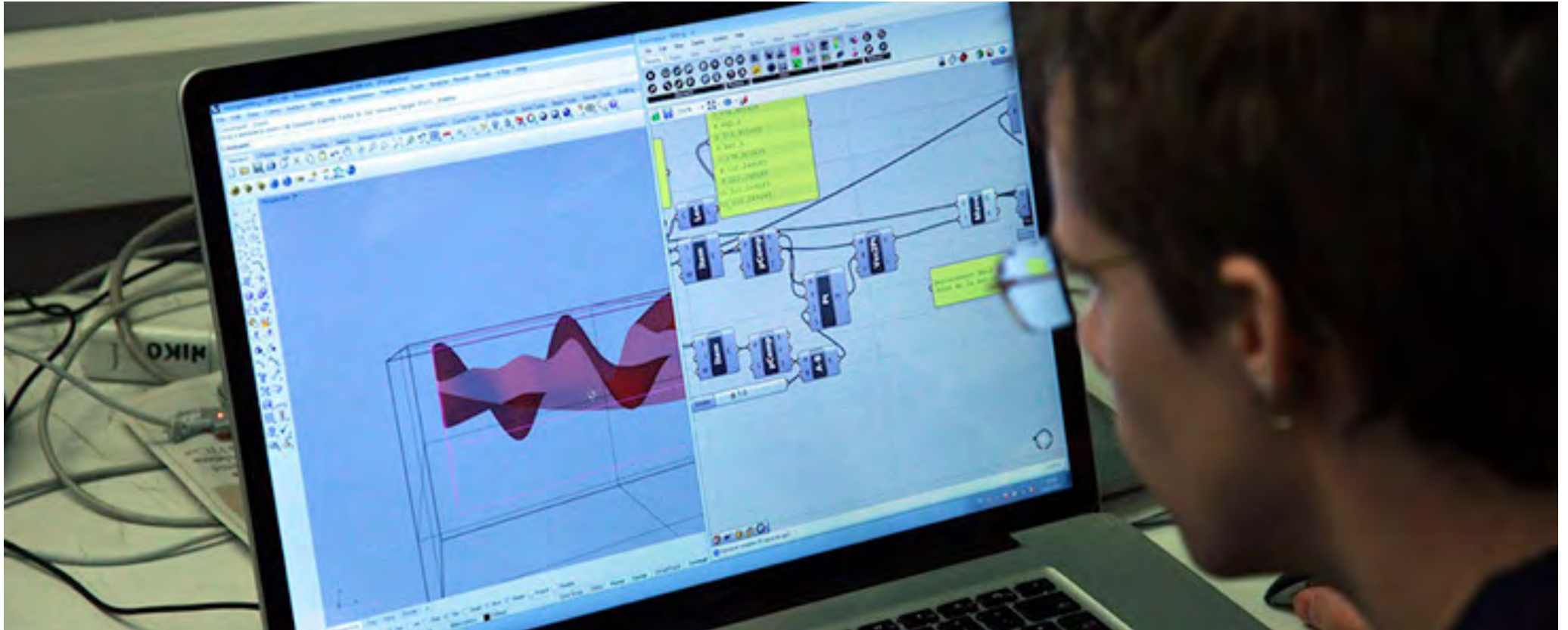
Class 950  
*Offshore Racing Sailboat*  
[Academic]





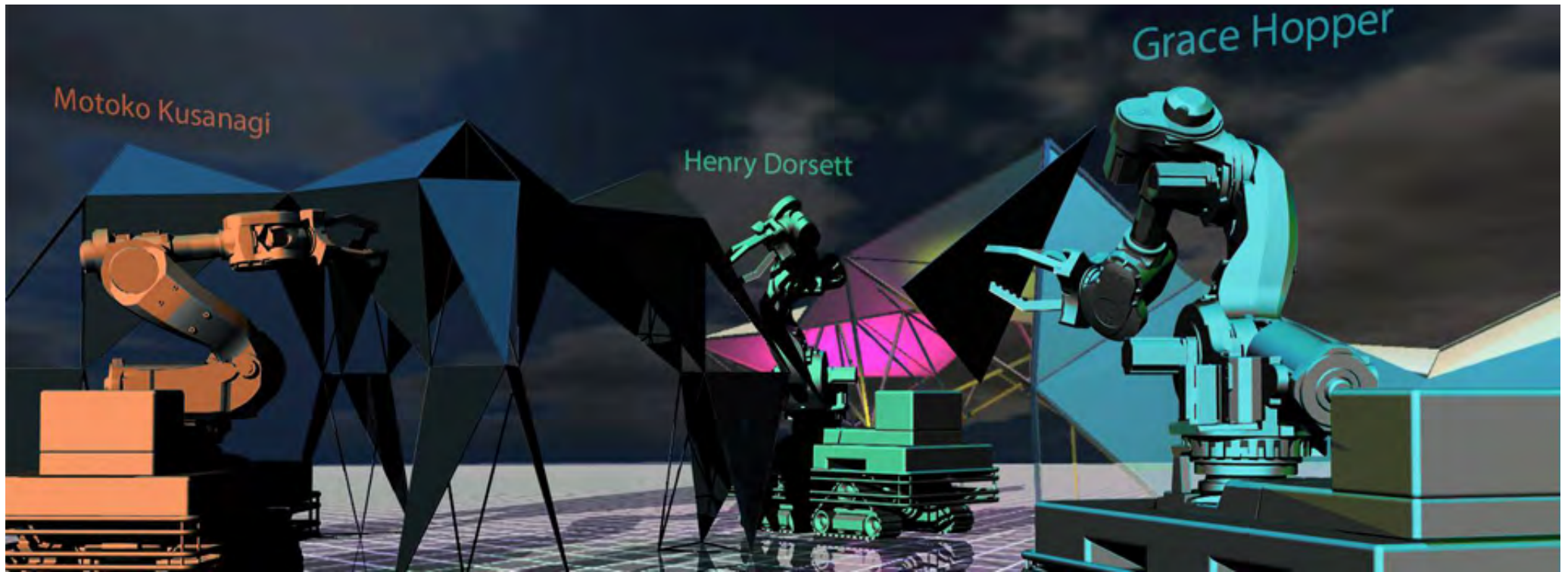
*Sailing Barge*  
*Sea/River Expedition Sailboat*  
*[Academic]*





*Digital Teaching*  
*Robotic control, prototyping, 3D modeling, parametric design and programming softwares*  
*[Teaching]*





*AAG 2016 Workshop*  
*Multi-User Cobotics Simulation in Virtual Reality applied construction*  
*[Teaching]*





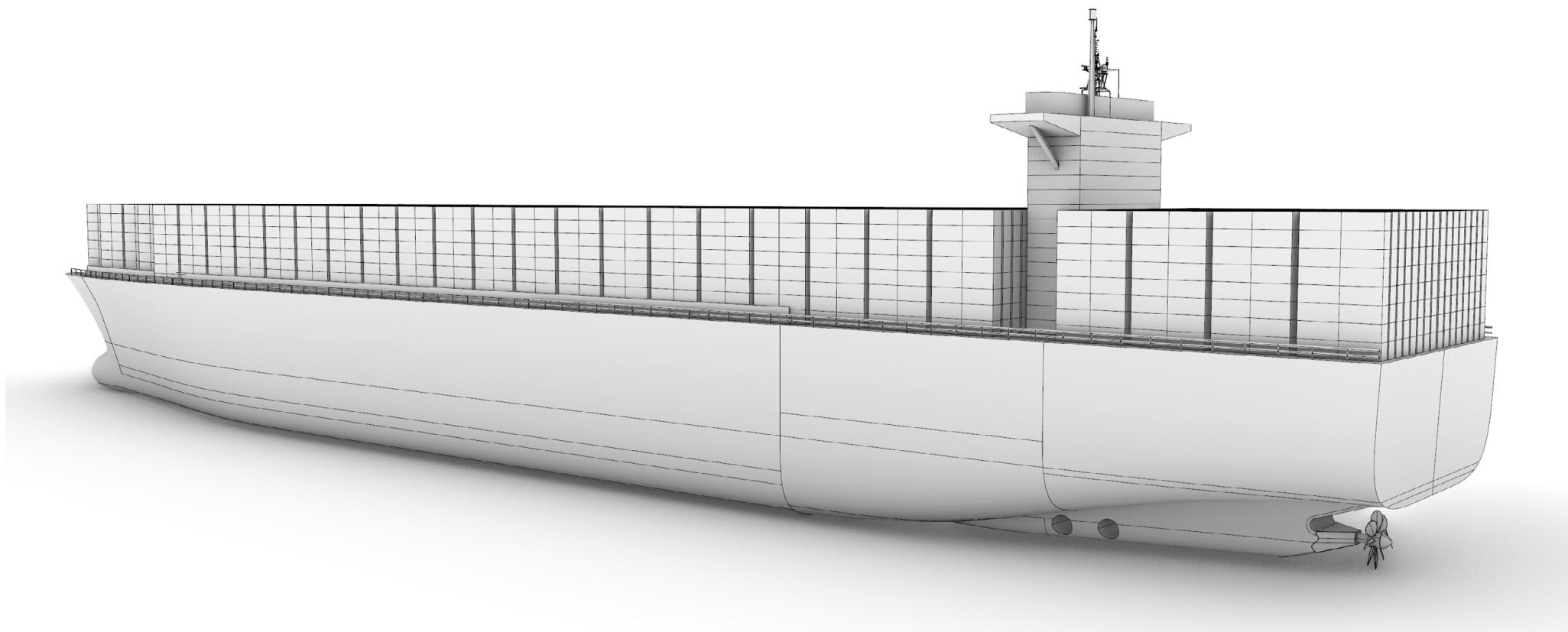
*DMS 2017 Workshop*  
*Virtual Immersive Architecture*  
*[Teaching]*



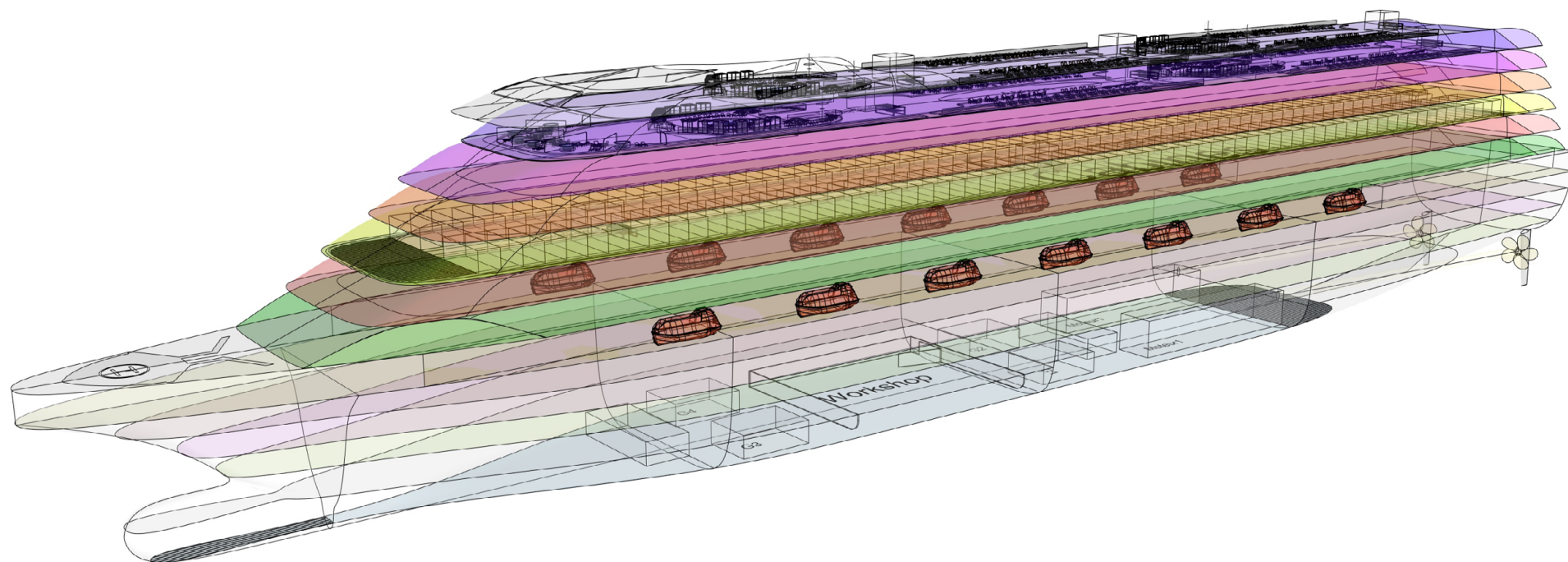


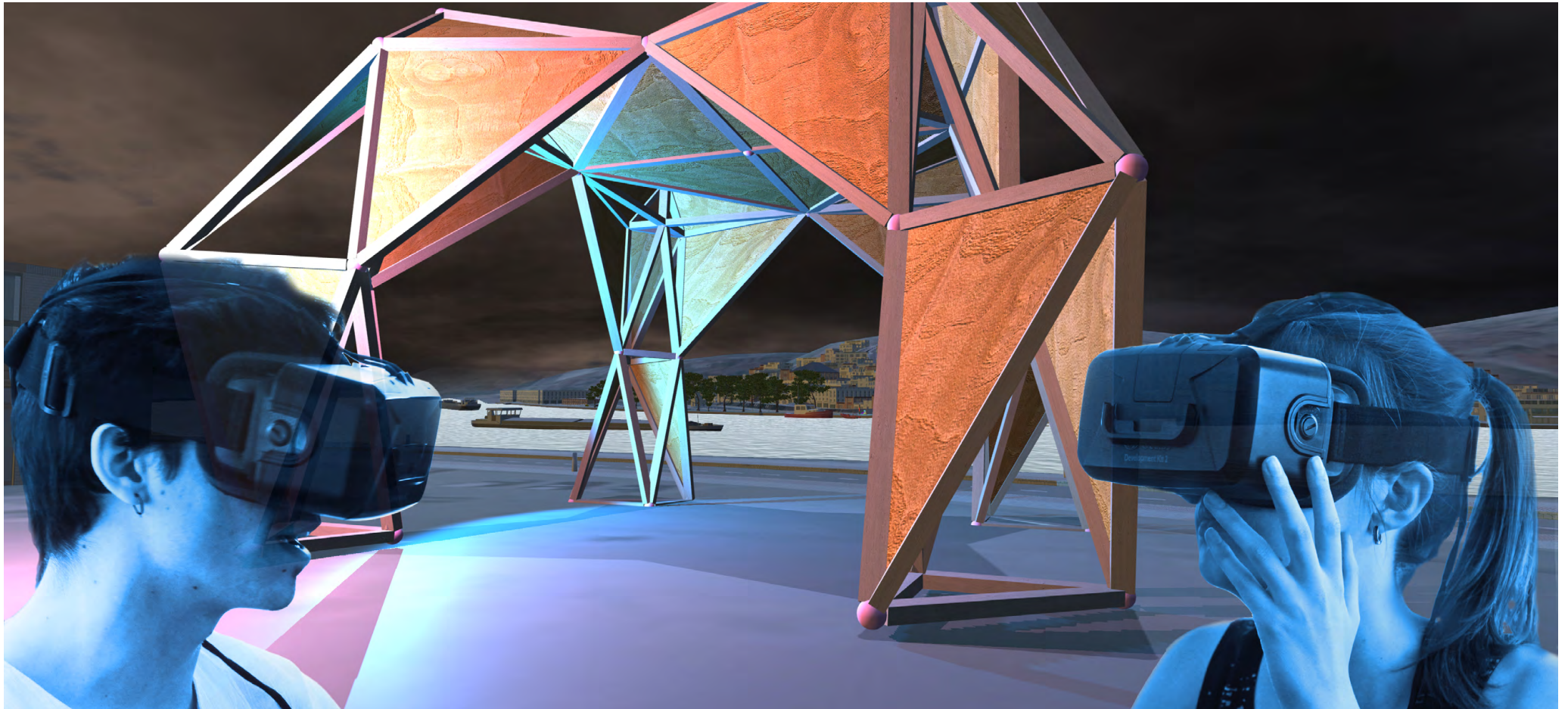
Virtual Reality Workshops  
Architectural and fine arts schools, conventions and events, exhibitions and shows  
[Teaching]





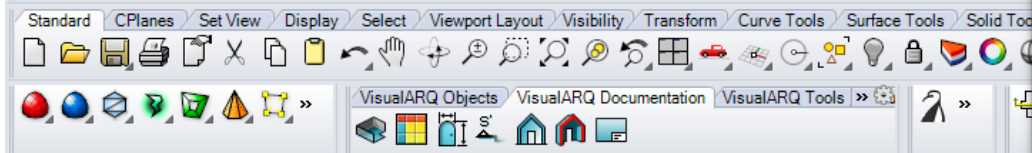
*Junior Entreprise*  
*Ensta Bretagne group follow-up*  
*[Teaching]*



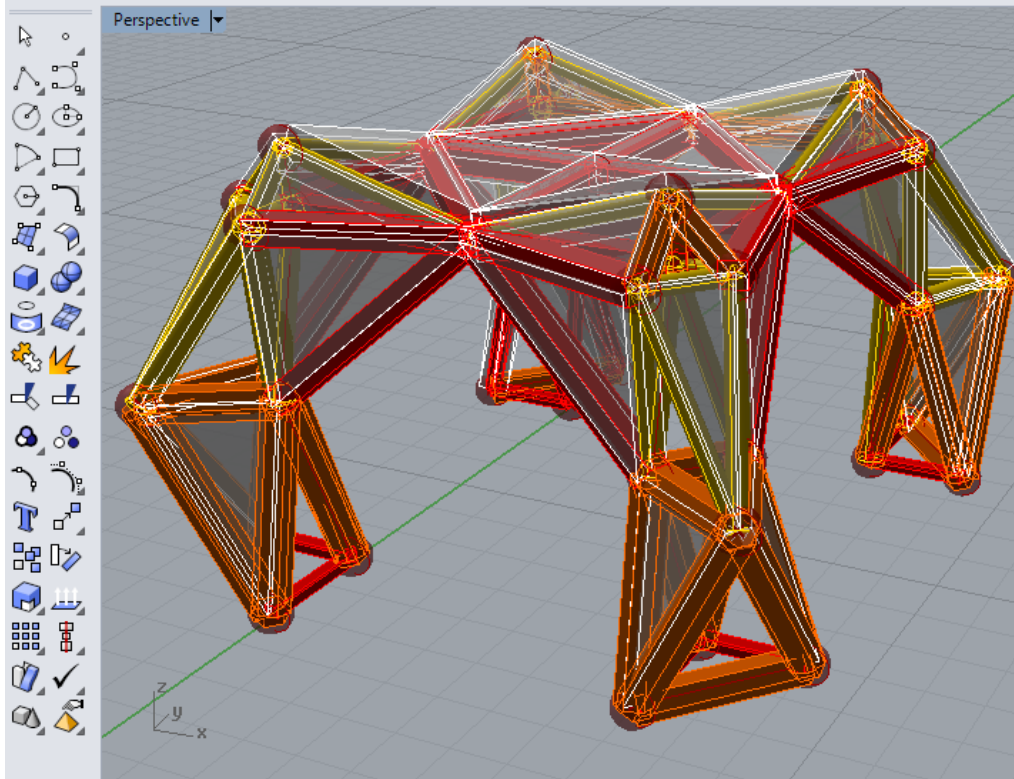


*DixieVR  
Immersive Multi-User Simulation for Architectural Conception  
[Consulting]*

Command: |



CADtoEarth Pane Export Model Export Image Get Surface Get Drawing Log Out



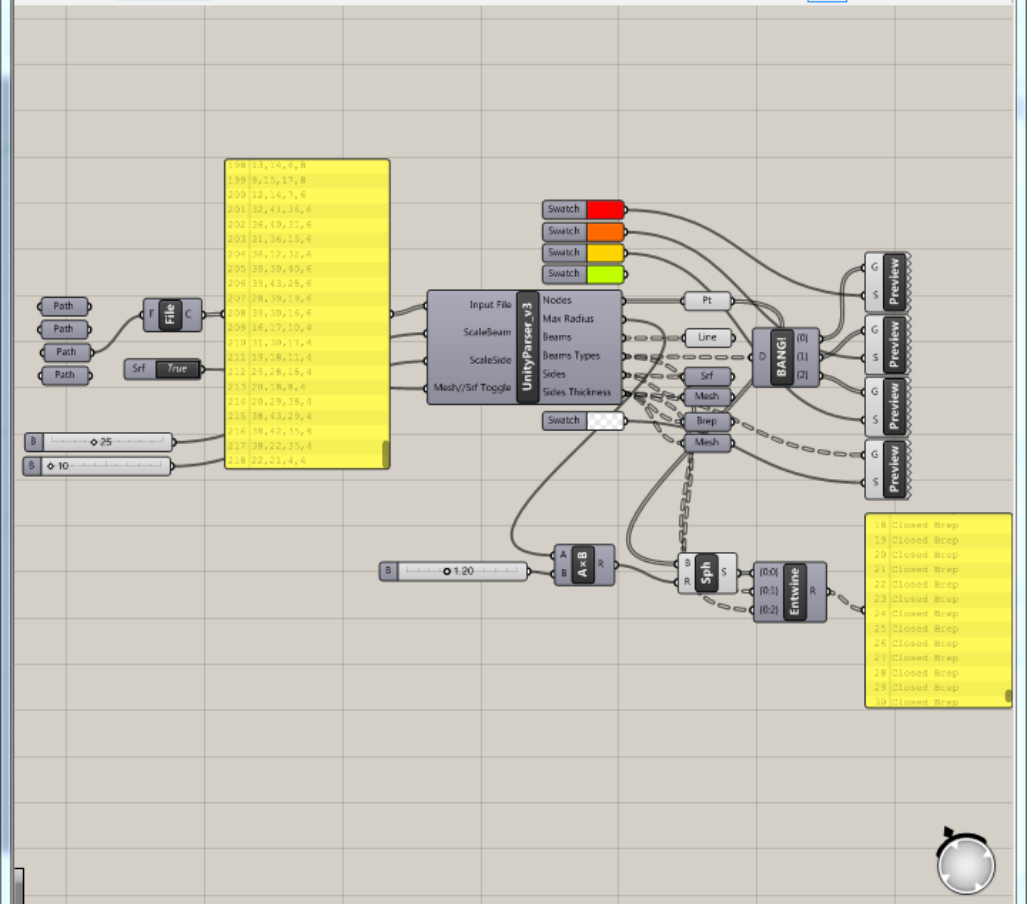
Perspective Top Front Right

End Near Point Mid Cen Int Perp Tan Quad Knot Vertex Project Disable

CPlane x 7.684 y 20.466 z 0.000 Millimeters Layer 05 Grid Snap Ortho



65% 65% 65% 65%

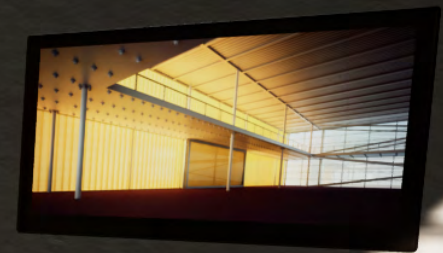
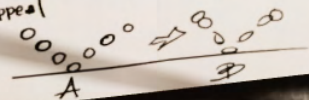


0.9.0076



*Dixie Lab  
Virtual Reality Experts, Architectural Research, Real-time Rendering  
[Consulting]*

1. Squash and stretch
2. staging
3. Anticipation
4. straight ahead and pose to pose
5. follow through and overlapping
6. slow in and slow out
7. arcs
8. secondary action
9. timing
10. exaggeration
11. solid drawings
12. appeal



File Edit View Curve Surface Solid Mesh Dimension Transform Tools Analyze Render Panels FINE™/Marine Help

Display mode set to "Mat\_Realistic(Sail)".  
Creating meshes... Press Esc to cancel  
Display mode set to "Mat\_Realistic(Sail)".  
Display mode set to "Wireframe".  
Display mode set to "Mat\_Realistic(Sail)".

Command:

Standard CPlanes Set View Display Select Viewport Layout Visibility Transform Curve Tools Surface Tools Solid Tools Mesh Tools Render Tools Draftir » Enscape Enscape Capturing

Perspective

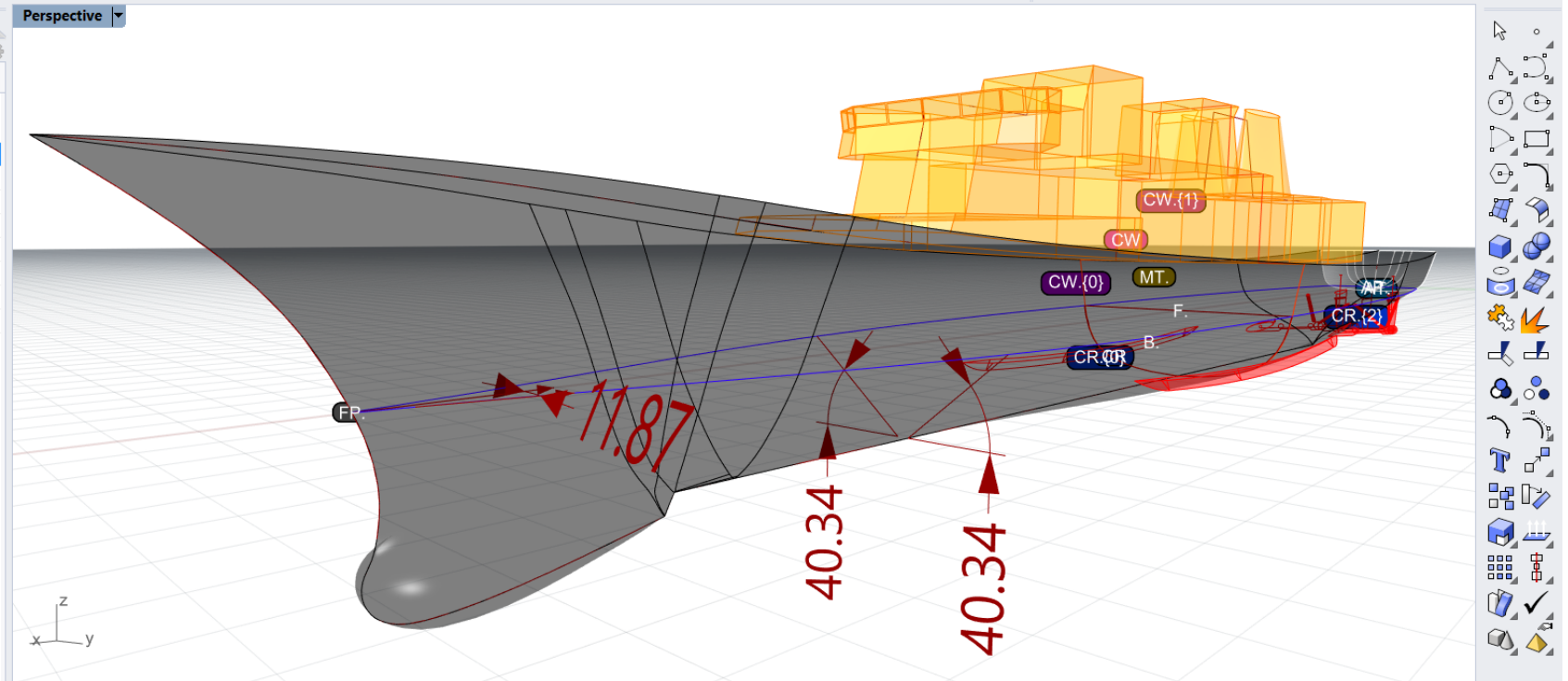
Name

- ▼ Nemo
  - ▼ DTMB
    - Hull
    - Transom
    - Superstructure
    - Appendage
    - Silhouette
    - > Planing
    - > Trimaran

# Nemo

Naval Efficiency and  
Marine Optimization

Grasshopper plugin  
for Ship Design



Nemo  
Grasshopper plugin for Ship Design  
[Consulting]

C:\Users\Mathieu Venot\AppData\Roaming\Grasshopper\UserObjects\Nemo\Examples\Example.3dm (1 MB) - Rhinoceros 6 Educational - [Perspective]

File Edit View Curve Surface Solid Mesh Dimension Transform Tools Analyze Render Panels FINE™/Marine Help

Autosave succeeded

Choose coordinate system ( CPlane World ): \_World

Choose world view ( Top Bottom Left Right Front Back Perspective TwoPointPerspective ): \_Front

Autosaving file as C:\Users\Mathieu Venot\AppData\Local\McNeel\Rhinoceros\6.0\AutoSave\Example (394472) RhinoAutosave.3dm

Autosave succeeded

Command:

Standard CPlanes Set View Display Select Viewport Layout Visibility Transform Curve Tools Surface Tools Solid Tools Mesh



Perspective



Name

▼ Nemo

> DTMB

▼ Planing

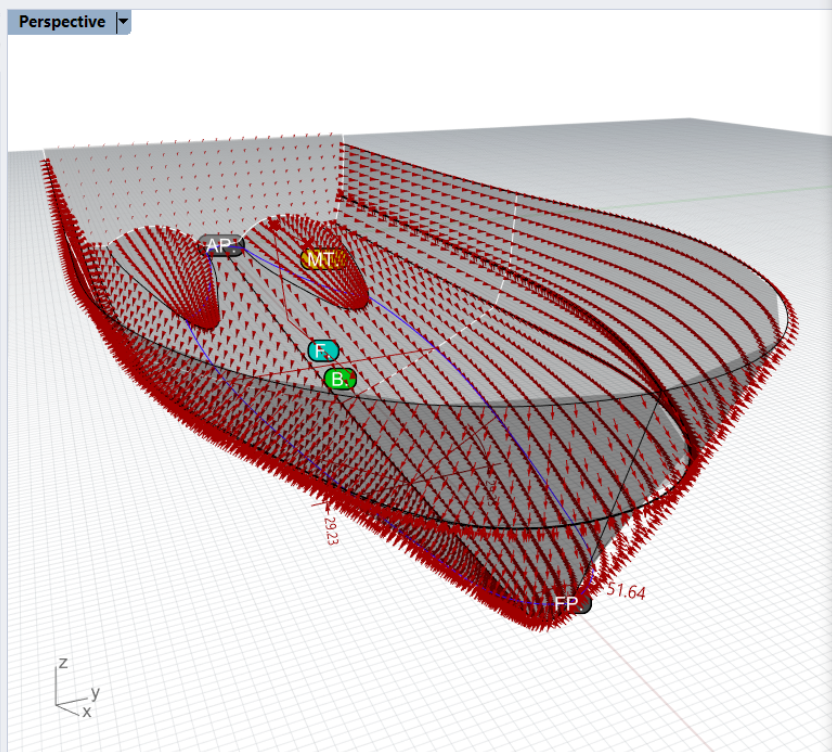
Hull

Transom

Gravity

Thrust

> Trimaran



Perspective Top Front Right

☒ End ☐ Near ☒ Point ☐ Mid ☐ Cen ☐ Int ☐ Perp ☐ Tan ☐ Quad ☐ Knot ☐ Vertex ☐ Project ☐ Disable

CPlane x 14375.962 y 4473.818 z 0.000 Millimeters Nemo

Grid Snap Ortho Planar Osnap SmartTrack Gumball

Grasshopper - 3\_Savitsky Prediction

File Edit View Display Solution Help 3\_Savitsky Prediction

Prm Math Set Vec Crv Srf Msh Int Tms Dis Nemo Kangaroo2 Ameba K G M U

0. Im... 1. Section 2. Hydrostatics 3. Resistance 4. Mesh 5. Extra

32%

Naval Efficient Modeling with Optimism?

C:\Users\Mathieu Venot\AppData\Roaming\Grasshopper\UserObjects\...

Speed = 40 Knots

FN = 1.360948

RN = 307092621.59752

Lk = 23.312731

d = 0.318953

TAU = 2.572692

T = 35286.680449

D = 35288.663603

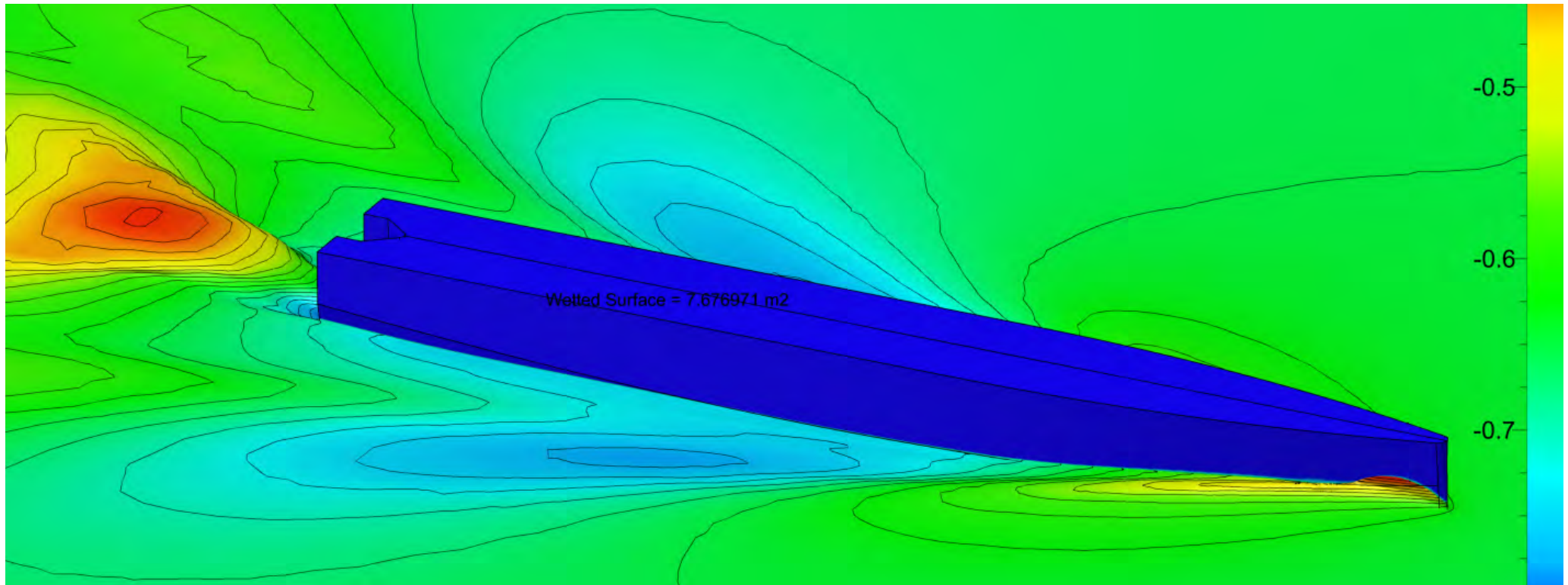
Cf = 0.001779

CV = 3.964057

Ps = 8.68101 & Check fig.18 for : 0.247344

PE = 726162.277695

PB = 1452324.55539







*Windsurfing*  
*Seas and lakes*  
*[Lifestyle]*





*RM 1050  
Refit after struck bottom  
[Lifestyle]*





*First 35*  
*One year around the North Atlantic Ocean*  
*[Lifestyle]*





Coco 650  
*Parents skippers on mediterranean Classe Mini circuit*  
*[Lifestyle]*





*Freycinet Barge*  
*Home living, handmade interior and equipments installation*  
*[Lifestyle]*



Mathieu VENOT

*mathieuvenot.com*