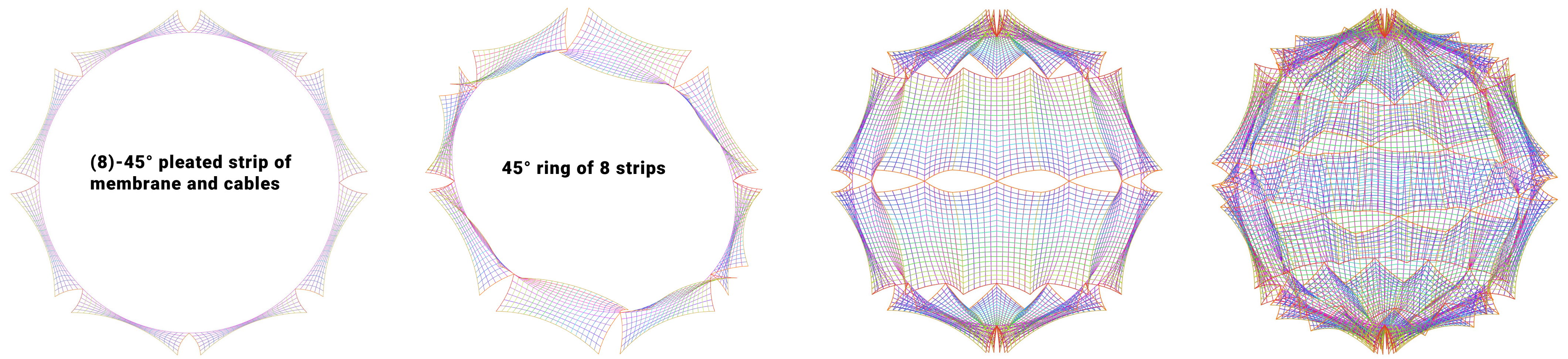


TENSION SPHERES

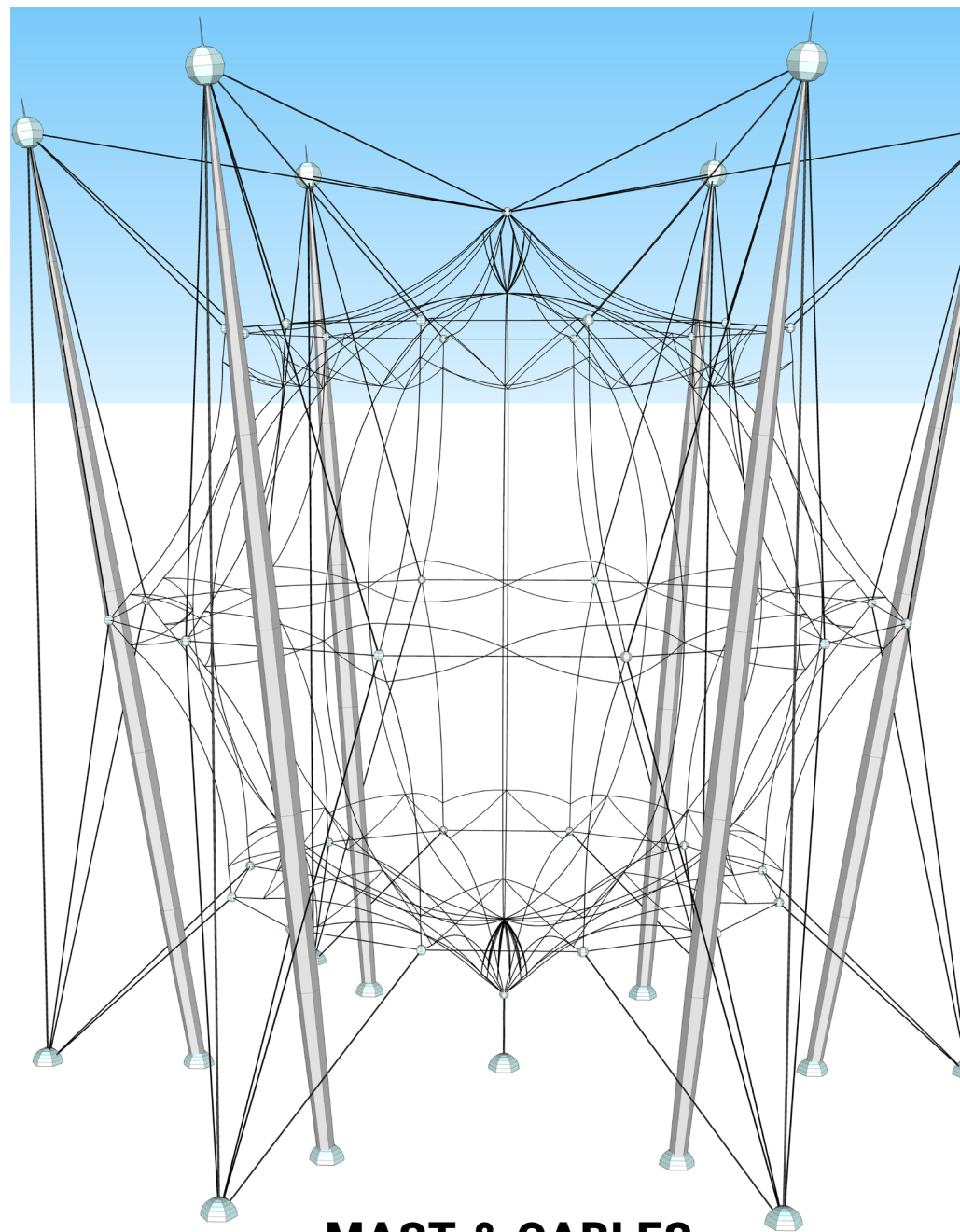
- Celebrating San José for the proximity to nature and the home of amazing technology
- Seed community engagement by engaging critical thought and intense play
- Bounding quantum uncertainty and the promise of relativistic certainty



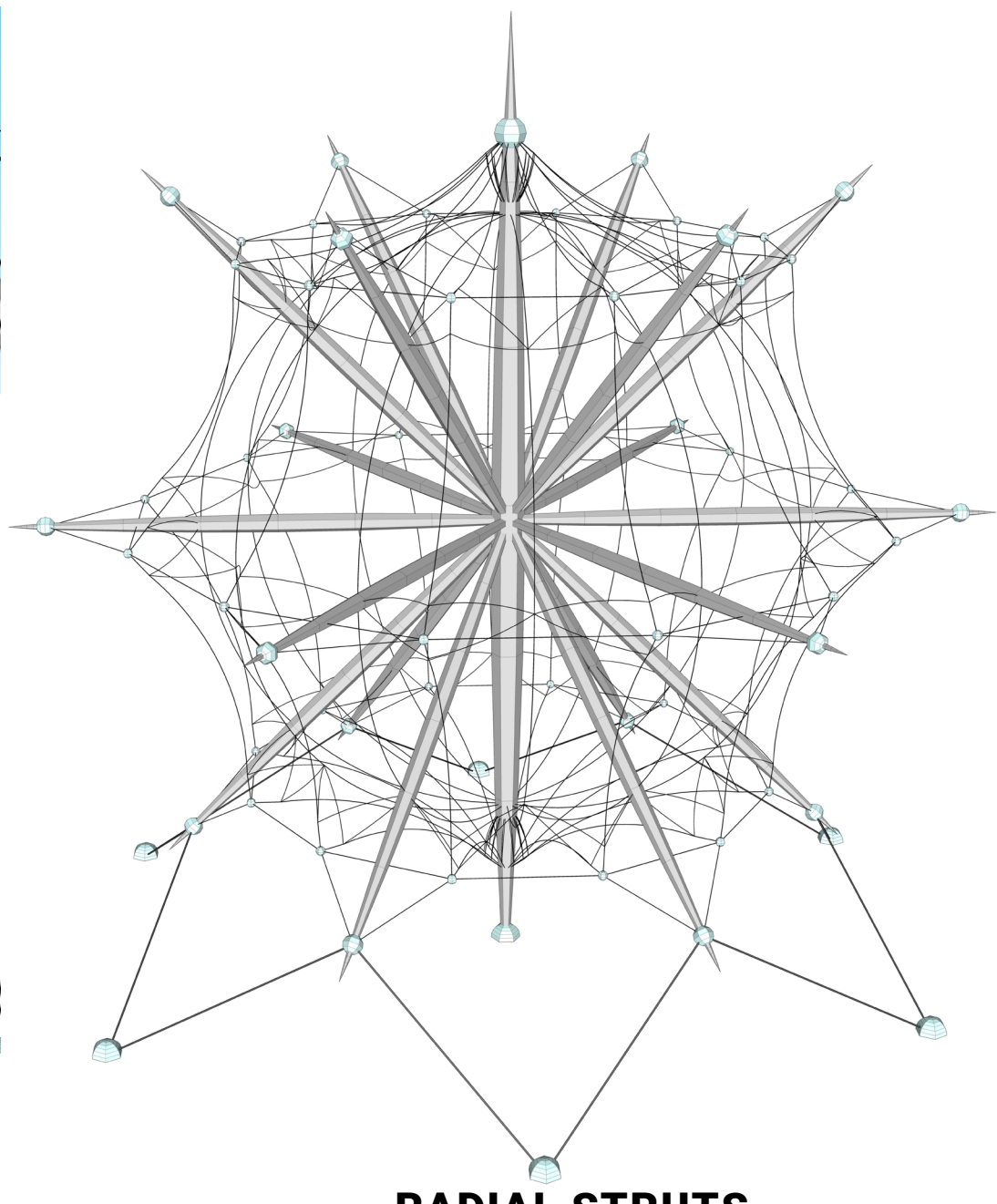
STRUCTURAL SYSTEM

TWO 45° (0° to 45° & 45° to 90°) STRIPS OF TENSILE MEMBRANES AND CABLES ARE MIRROR REFLECTED TO CREATE A 30° RING OF 8 STRIPS. THE RING IS THEN ARRAYED ABOUT THE VERTICAL AXIS (POLES) TO CREATE A FULL 360° SURFACE OF REVOLUTION. THE STRIP PLEATED FORMS HAVE OUTER CONCAVE RIDGE CABLES AND INNER CONVEX VALLEY CABLES THAT CREATE A TENSILE TRUSS SYSTEM WITH CABLE CHORDS AND TENSILE MEMBRANE (ARCHITECTURAL FABRIC OR FILM) SHEAR WEBBING. THE TENSILE MEMBRANE SHEAR WEBBING COULD BE REPLCED WITH DIAGONAL CABLES. THE INNER LONGITUDINAL VALLEY CABLES CREATE CONTINUOUS CLOSED TENSION RINGS. TWO DISTINCT STRUCTURAL SUPPORT SYSTEMS ARE USED TO PROVIDE ARMATURE FOR THE TENSILE SYSTEM TO THRUST AGAINST:

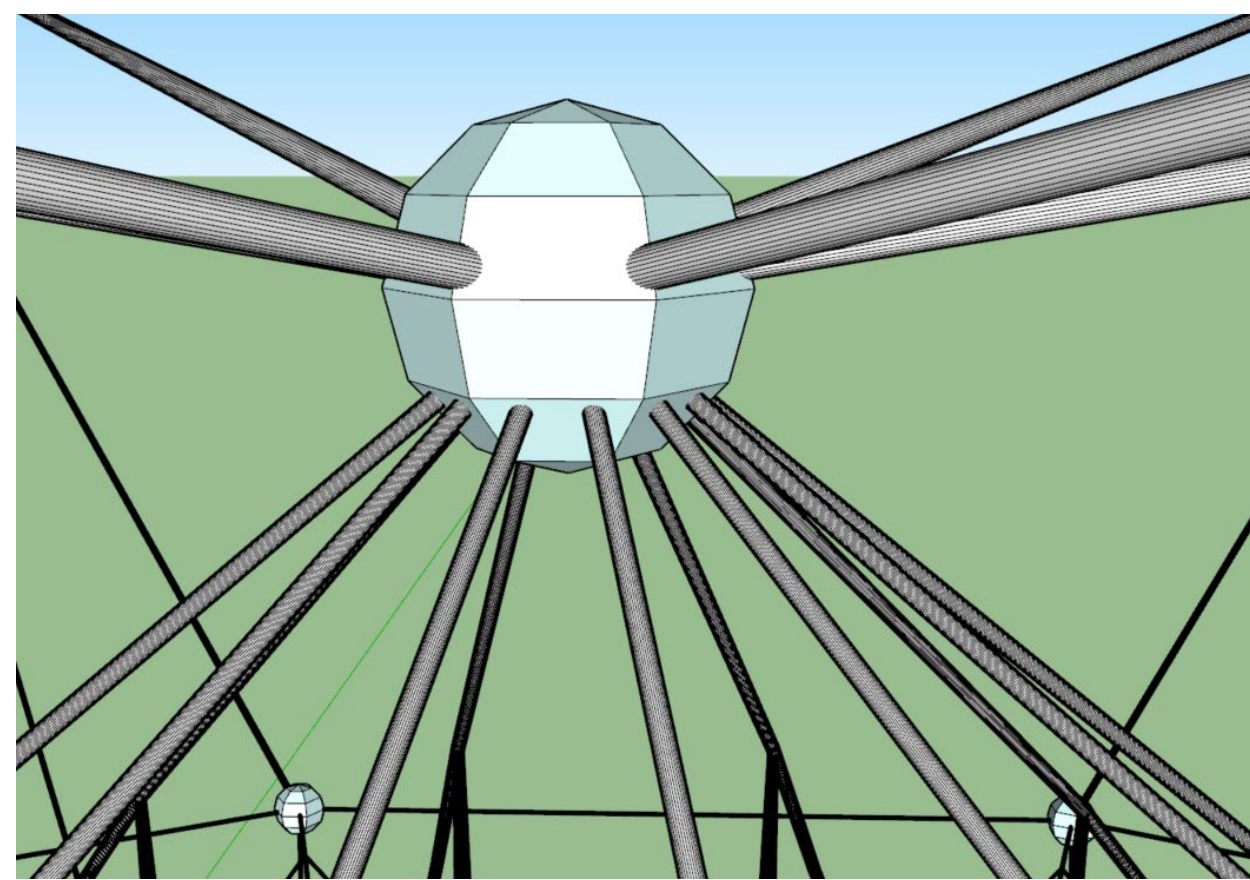
1. **MAST & CABLES:** 6 EXTERNAL MASTS WITH GUY CABLES AND BACK-STAY CABLES PULL OUTWARD TO PRETENSION THE SPHERES.
2. **RADIAL STRUTS:** INTERNAL STRUTS RADIATE OUT FROM THE SPHERE ORIGIN (CENTER) WITH A CENTRAL COLUMN. THE STRUTS PUSH OUTWARDS TO PRETENSION THE SPHERES. THE TENSION SPHERE IN COMBINATION WITH CABLE STAY SUPPORTS STABILIZE THE CENTRAL COLUMN BALANCING THIS SINGLE POINT OF GRAVITY SUPPORT.



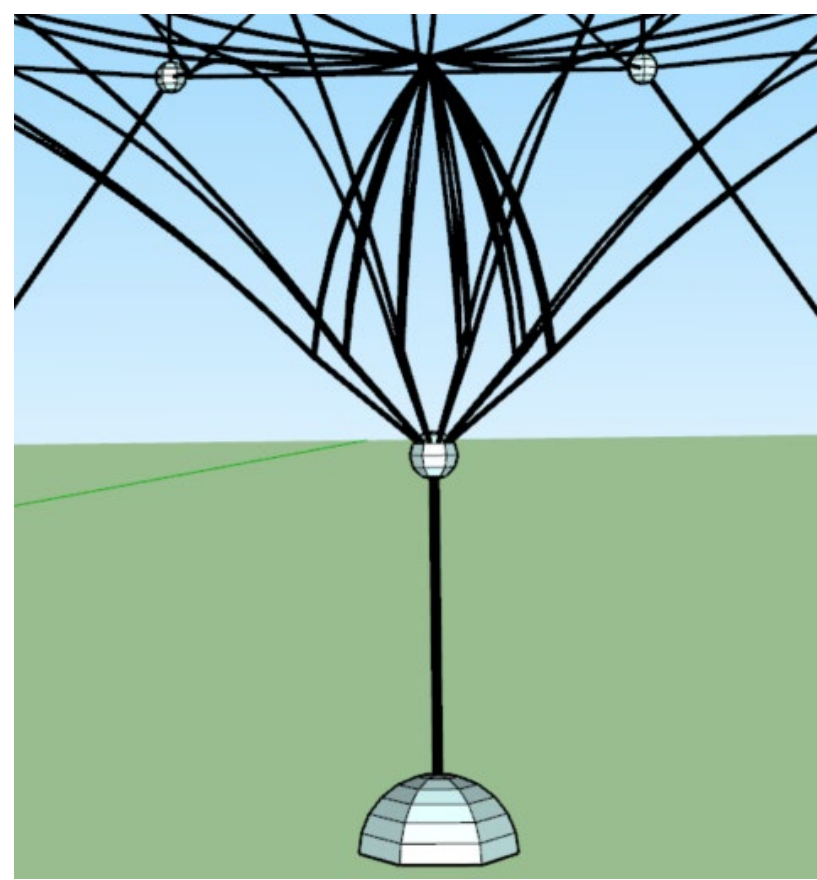
MAST & CABLES
(tensile membrane or diagonal cables not shown for clarity, but is necessary for stability)



RADIAL STRUTS
(tensile membrane or diagonal cables not shown for clarity, but is necessary for stability)

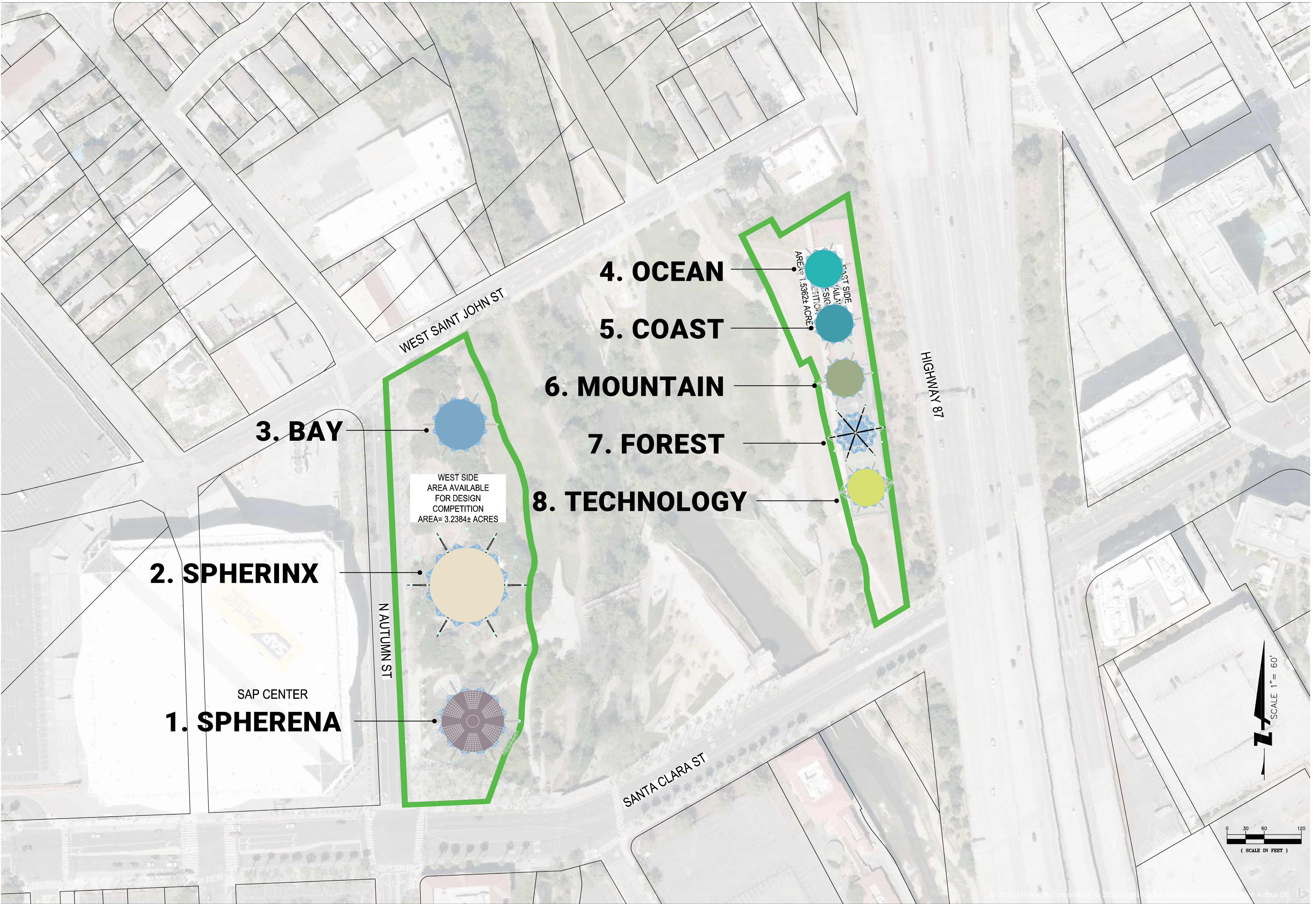


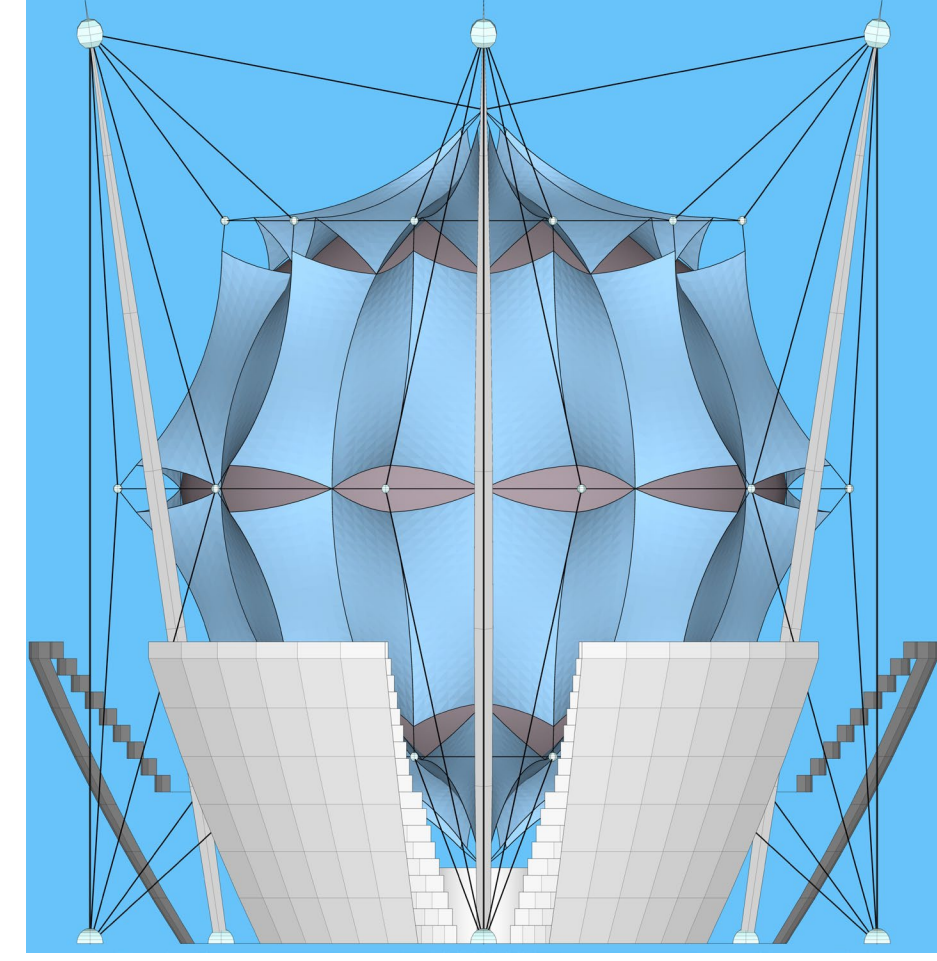
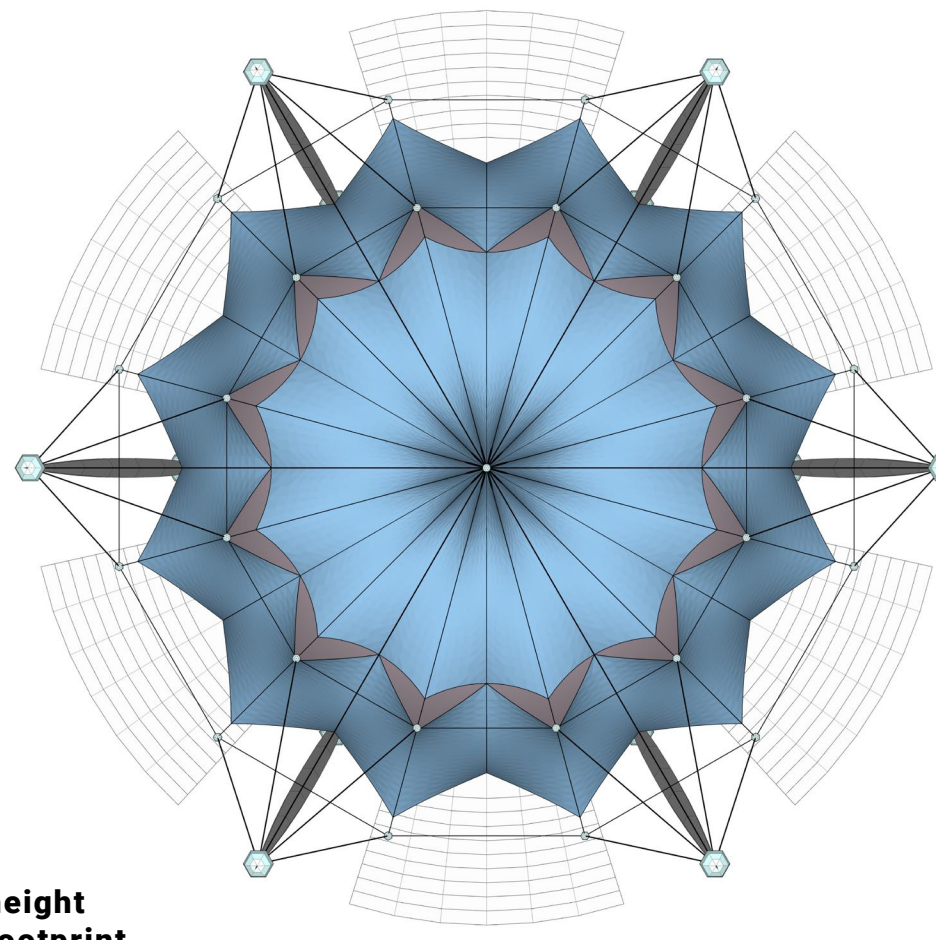
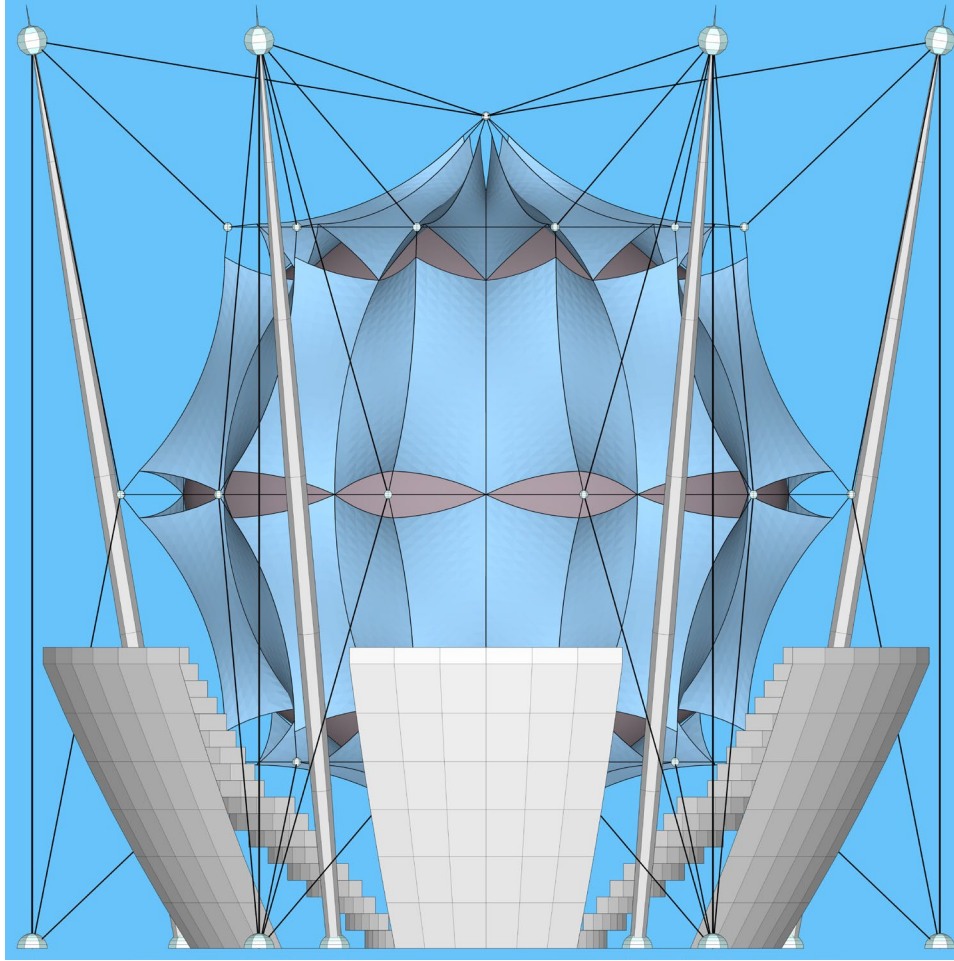
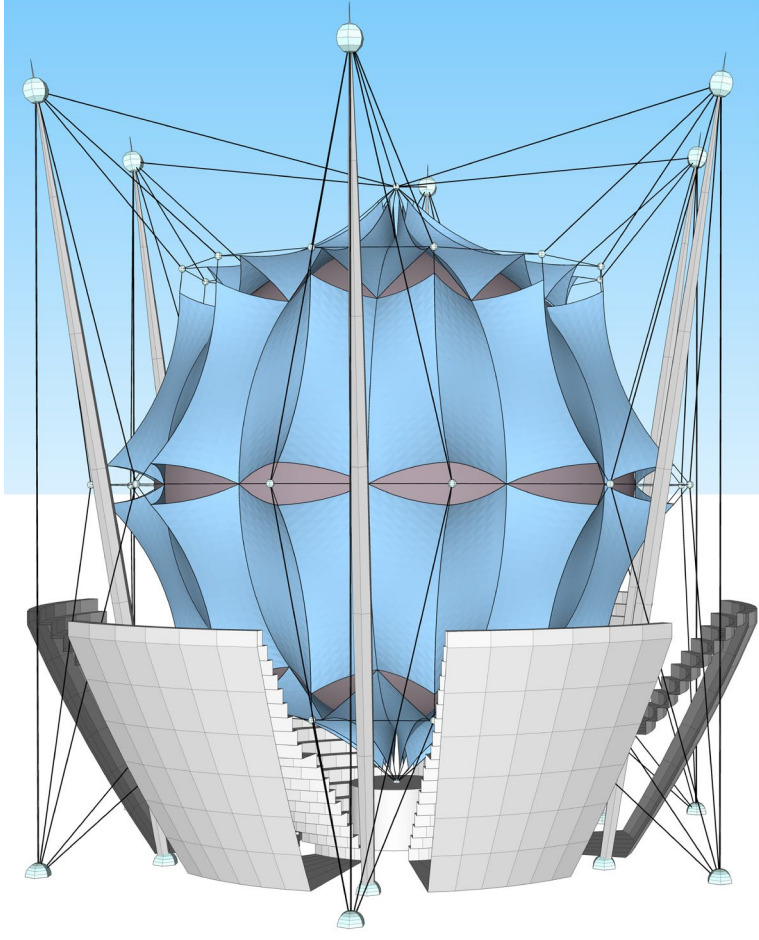
TOP NODE
'NORTH POLE'



BOTTOM NODE
'SOUTH POLE'

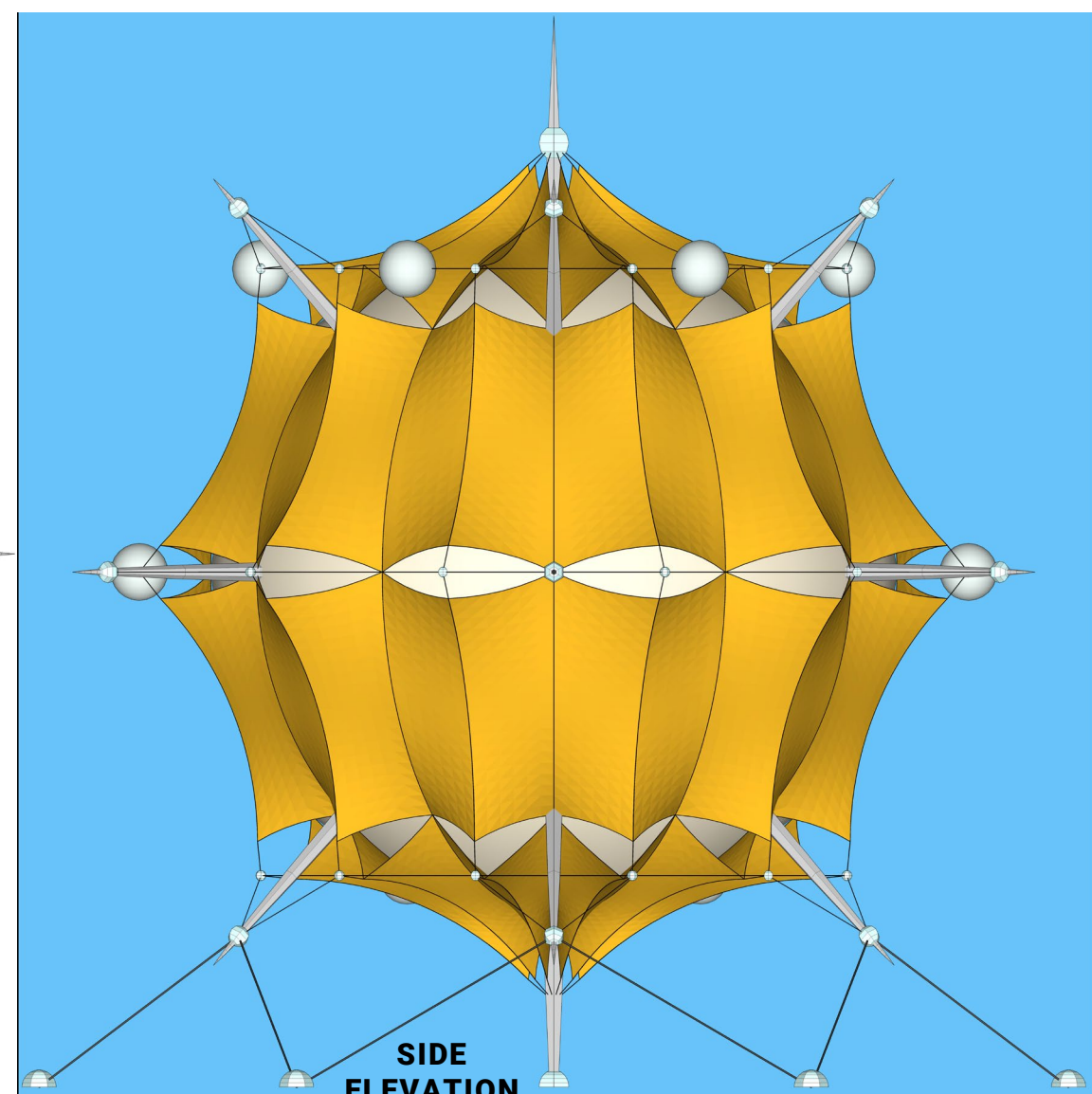
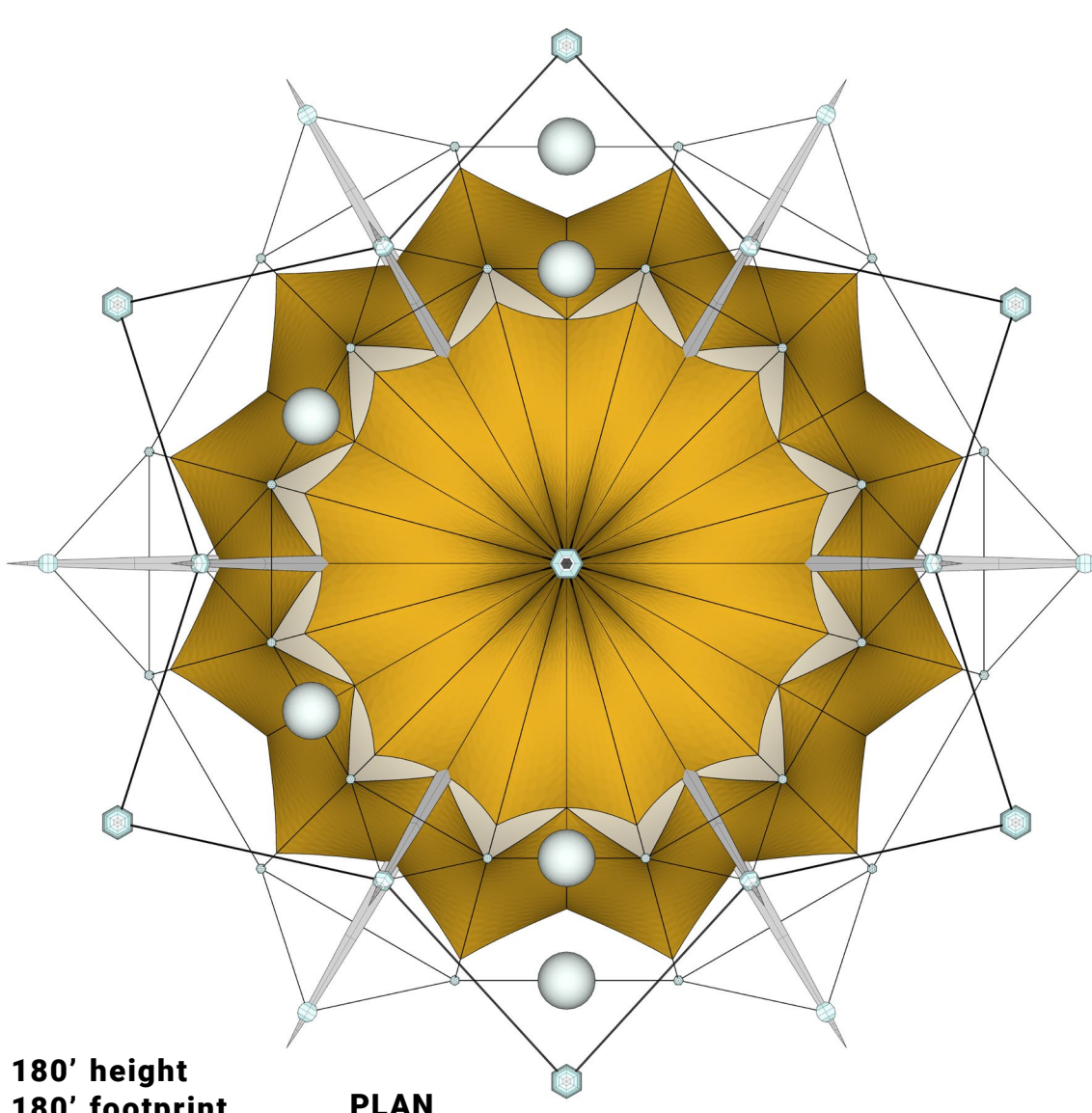
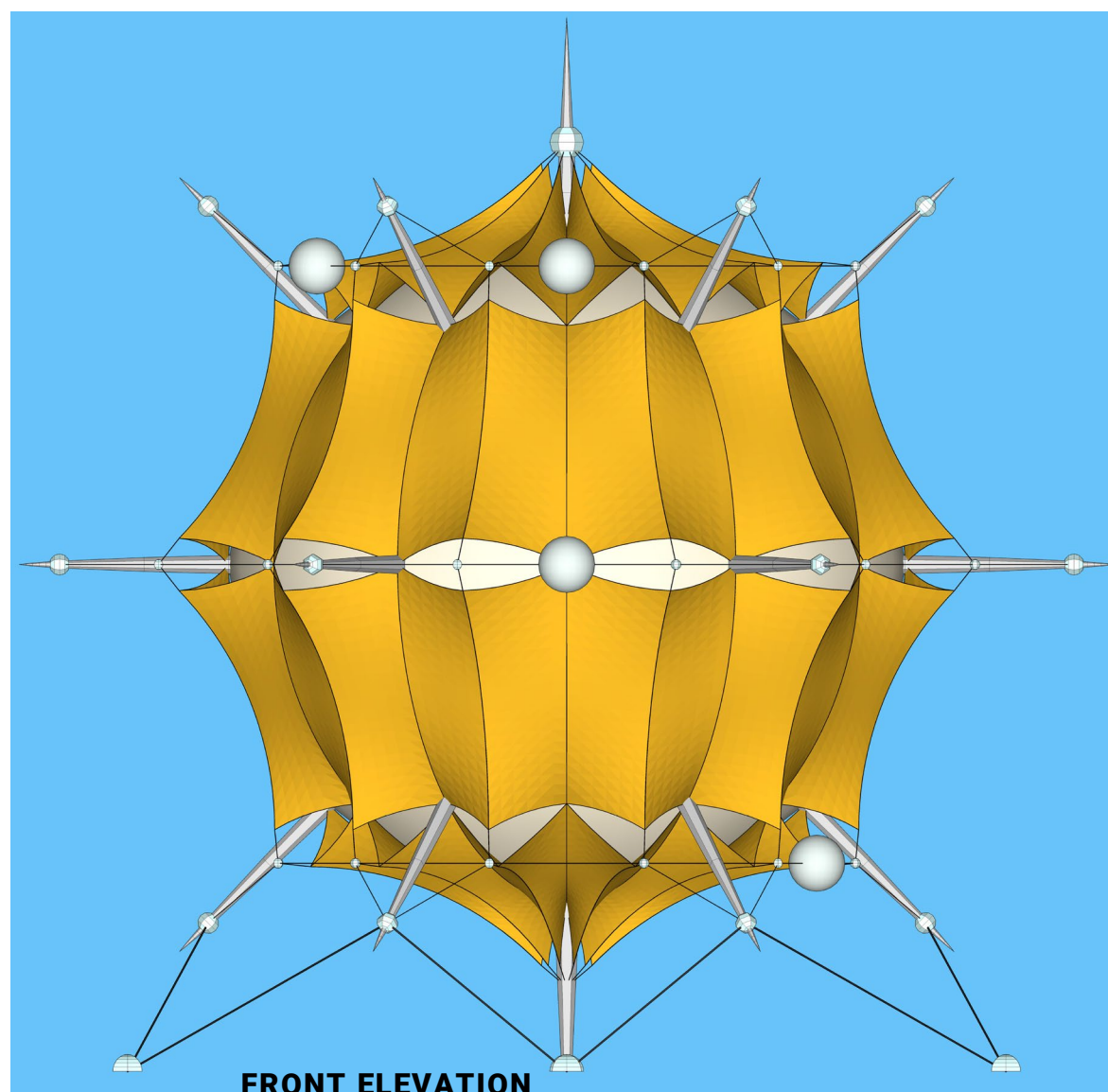
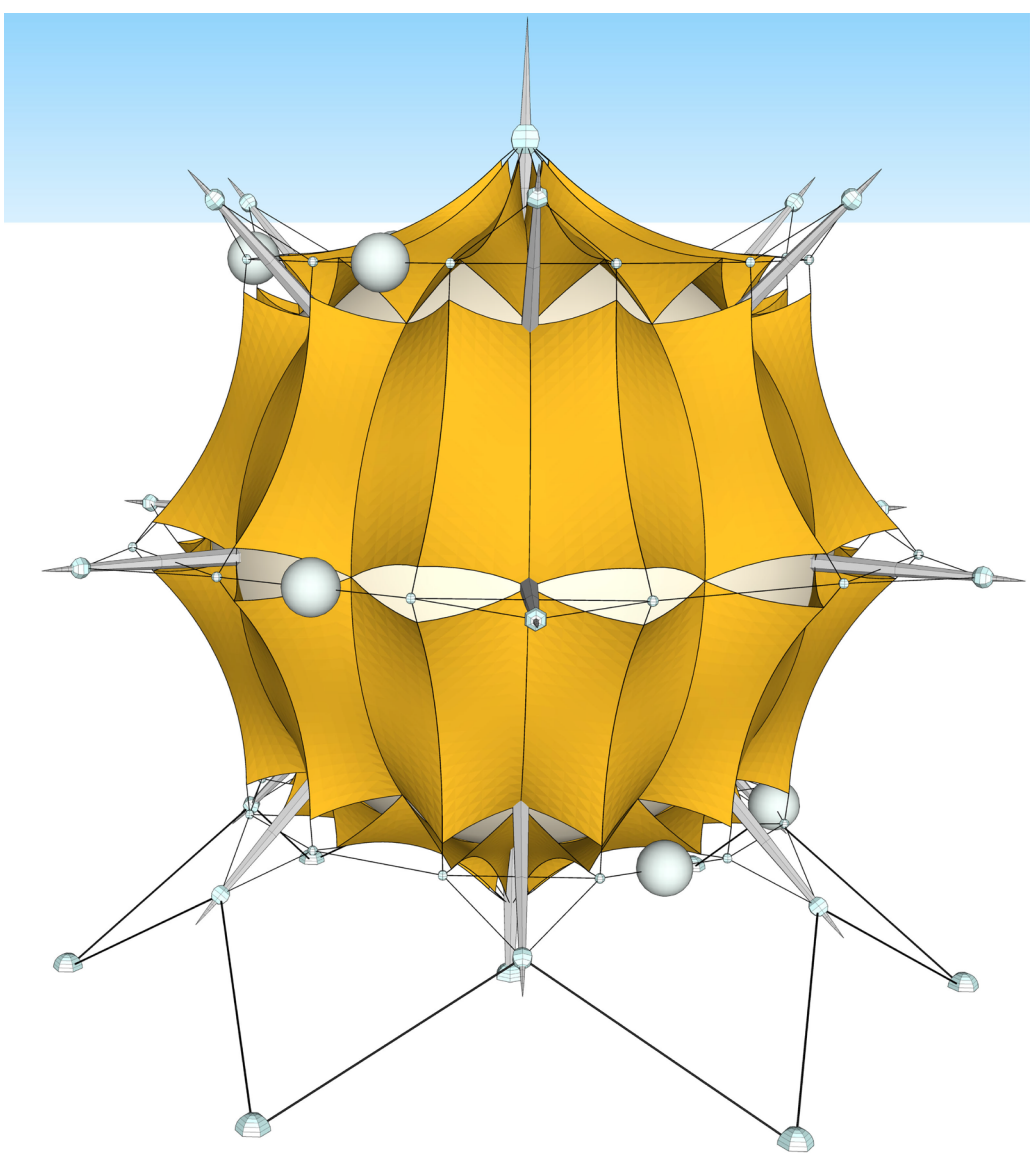
CABLE CONFLUENCES: Like rivers meeting, forces intersecting for new connections





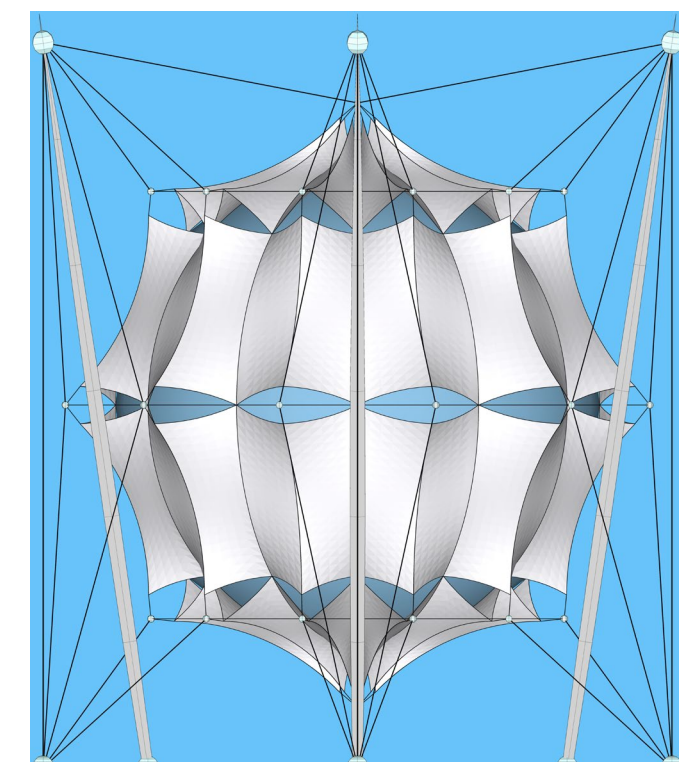
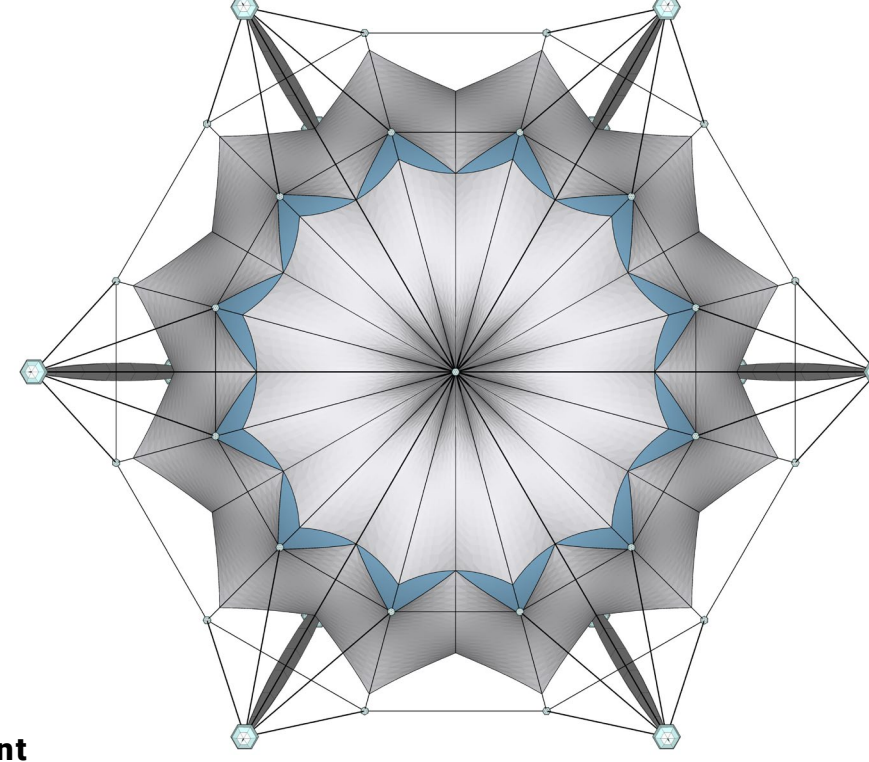
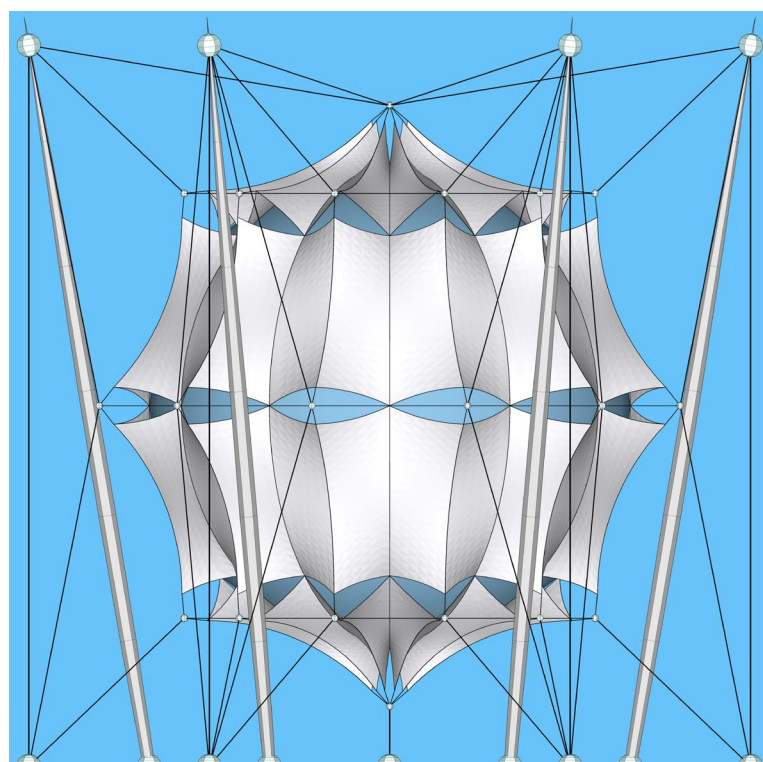
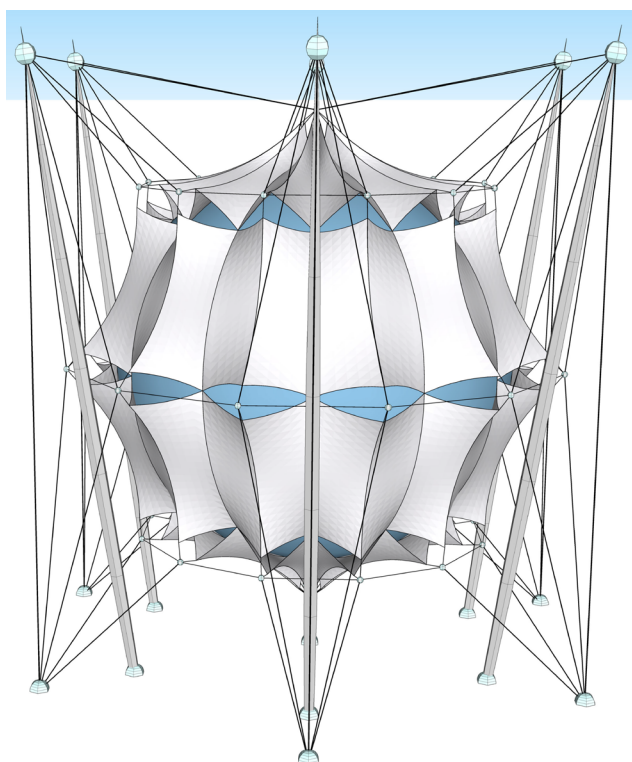
1. SPHERENA = SPHERE + ARENA

An event space designed around eSports with the potential to host any event. The pleated fabric provides a projection surface plus the inner sphere large screen.



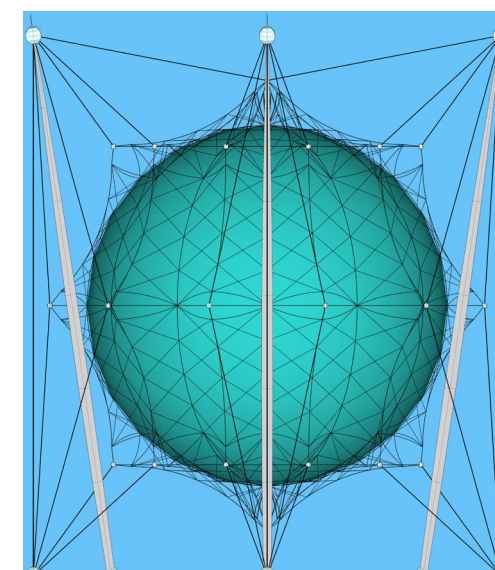
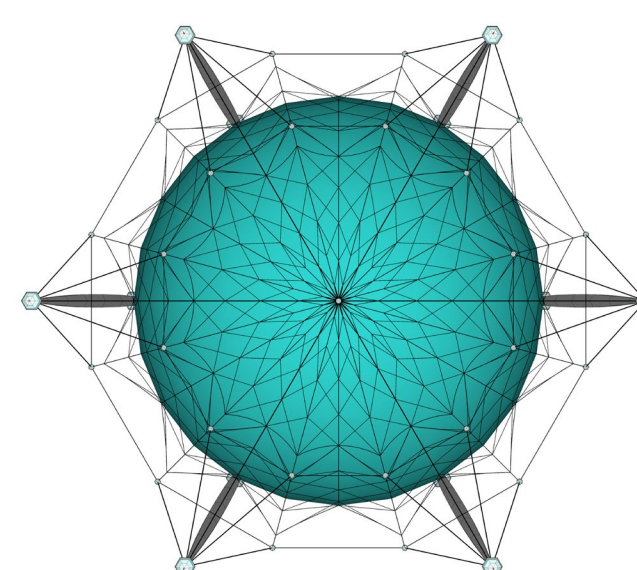
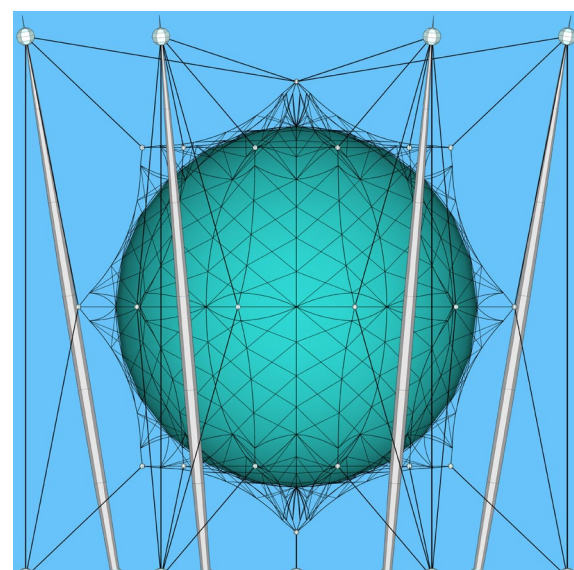
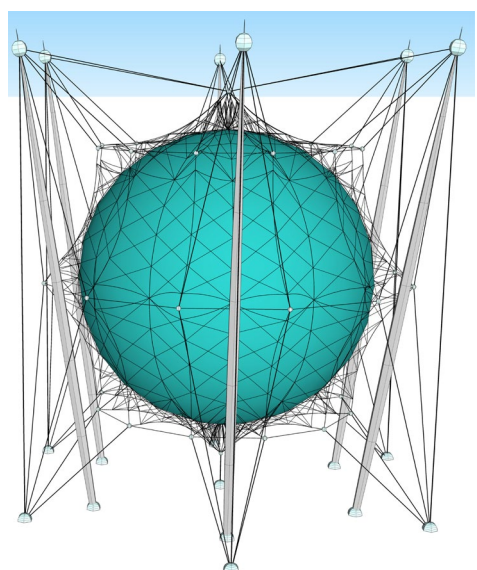
2. SPHERINX = FERRIS WHEEL + CAROUSEL

The world's first contemporary amusement ride with spherical gondolas that orbit and immerse within the tension sphere. Mast & Cable external support structure.



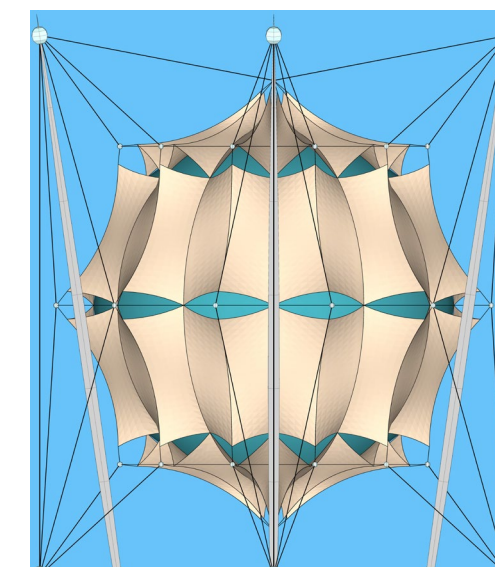
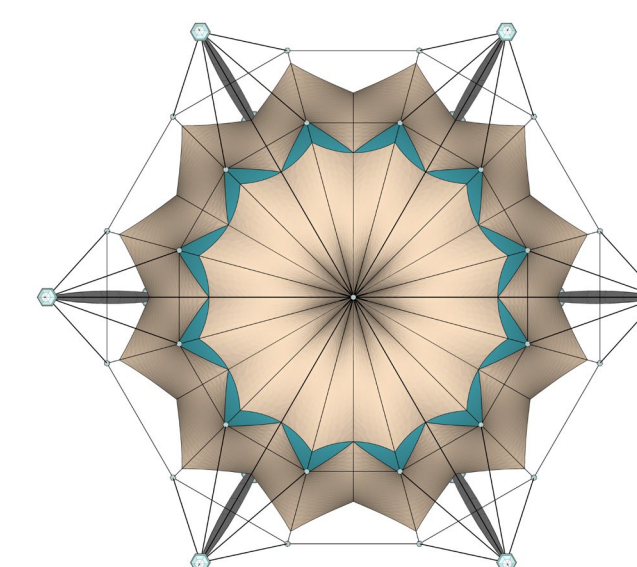
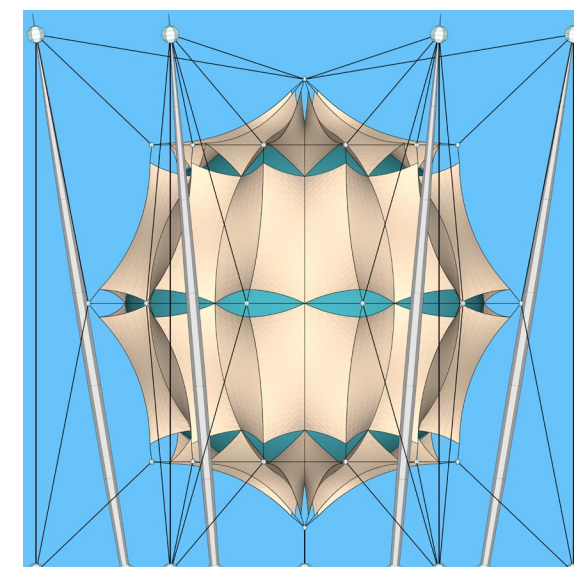
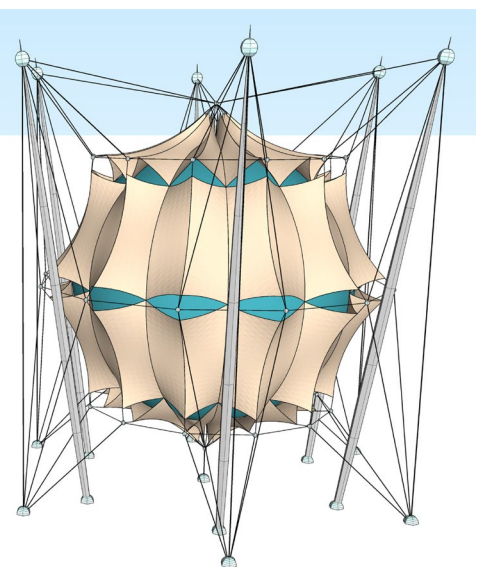
3. BAYSPHERE = San José anchors the bay

Central sphere representing the bay surrounded by fog-like fabric. Mast & Cable external support structure.



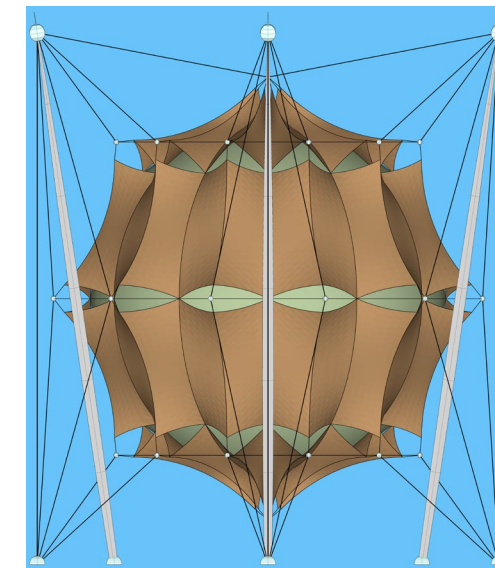
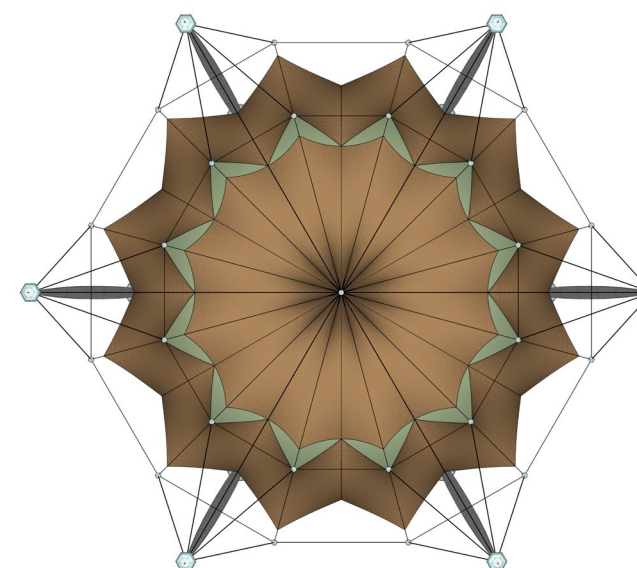
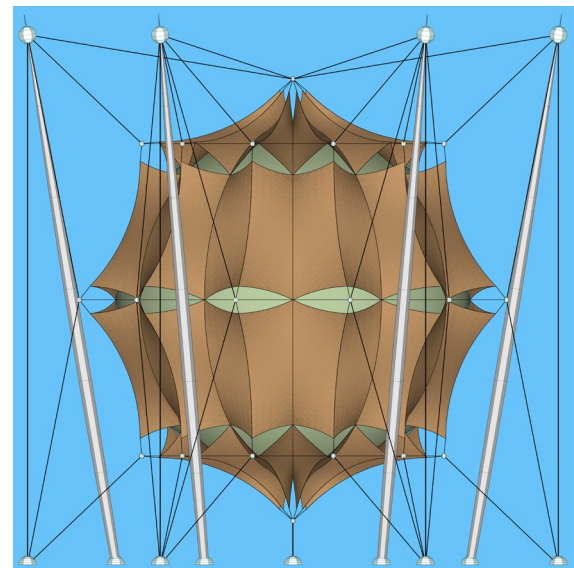
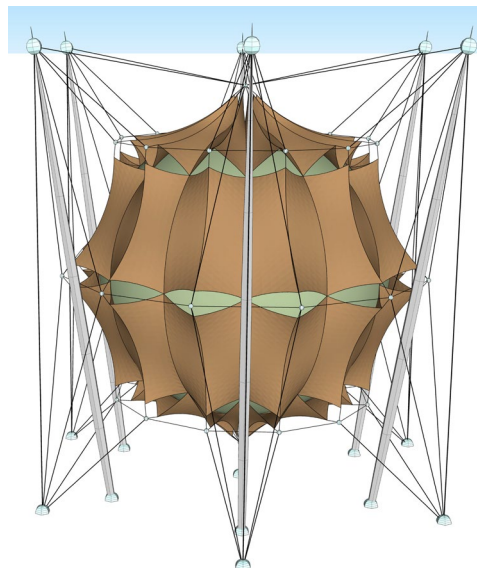
4. OCEANSPHERE = ties to the Pacific Ocean

Central sphere with cable net trusses and rings. Mast & Cable external support structure. Tensile membrane removed and replaced with diagonal cables.



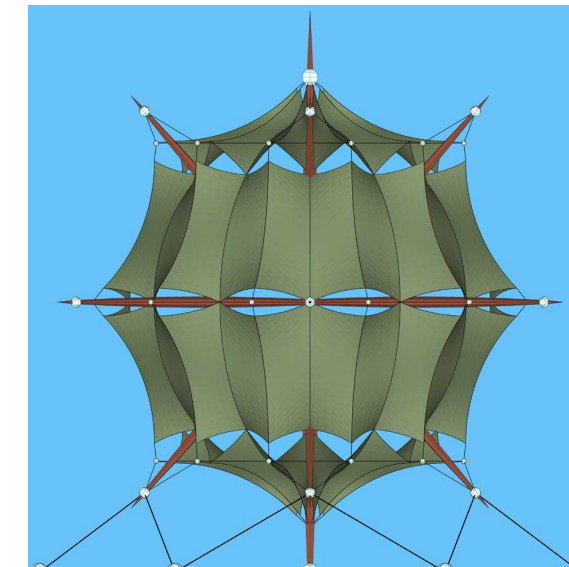
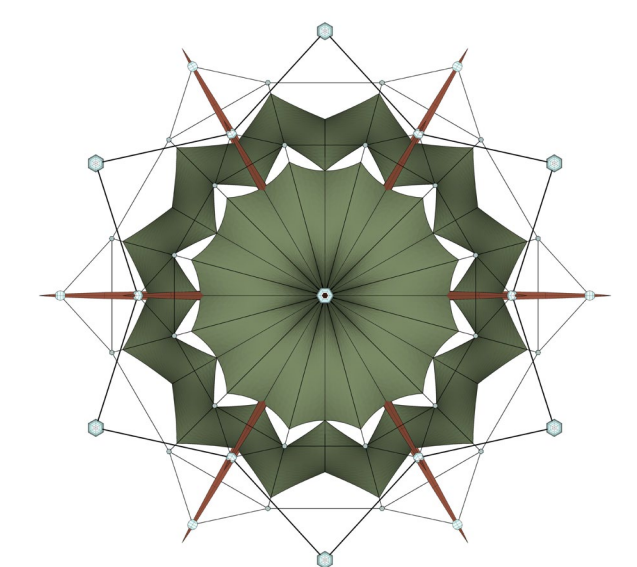
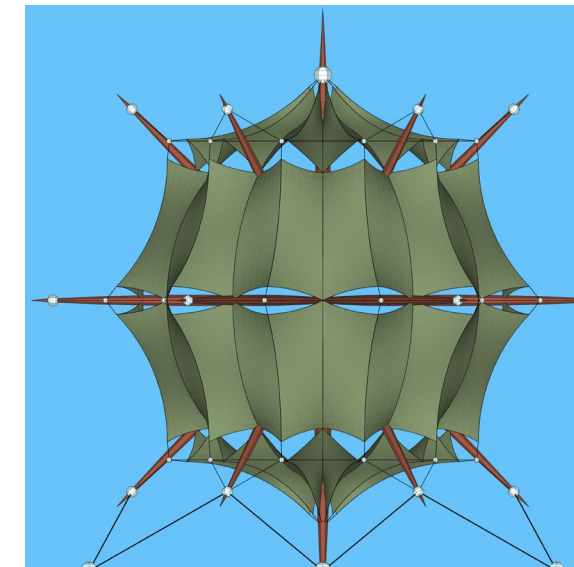
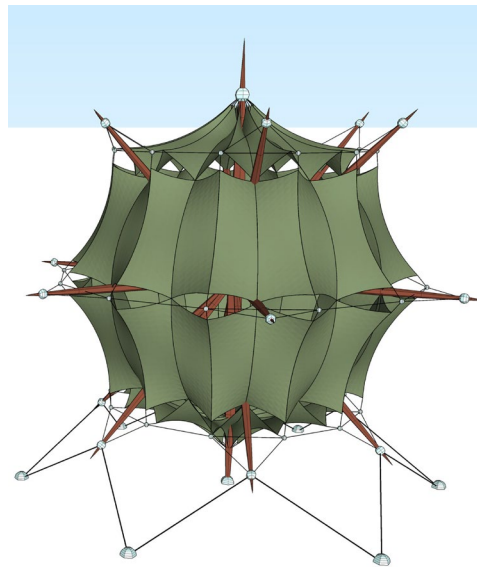
5. SHORESPHERE = proximity to the coast

Central sphere representing the ocean enveloped by pleated sandy membrane. Mast & Cable external support structure.



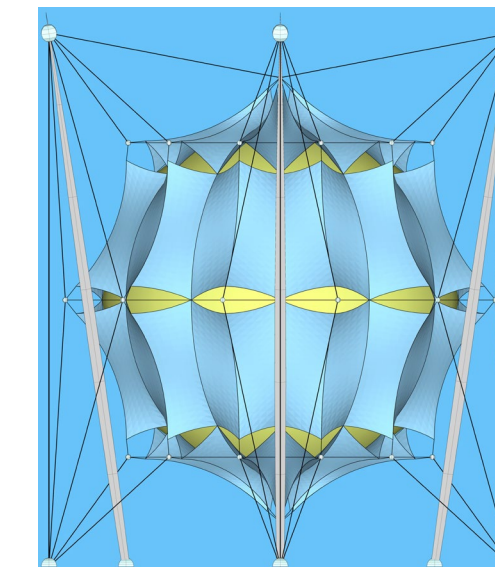
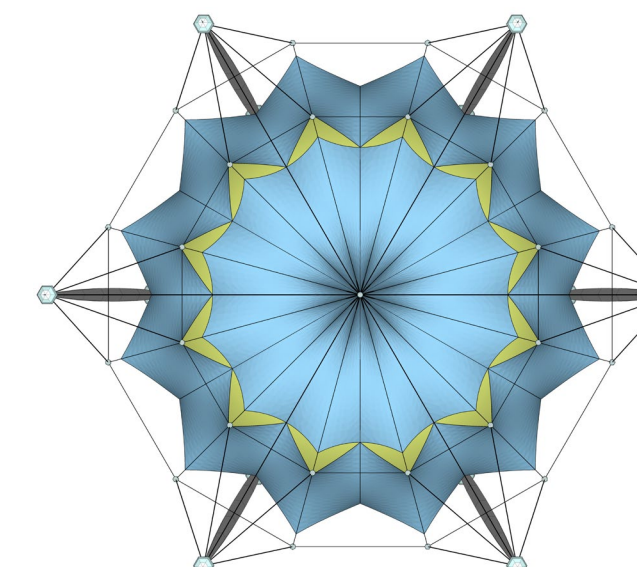
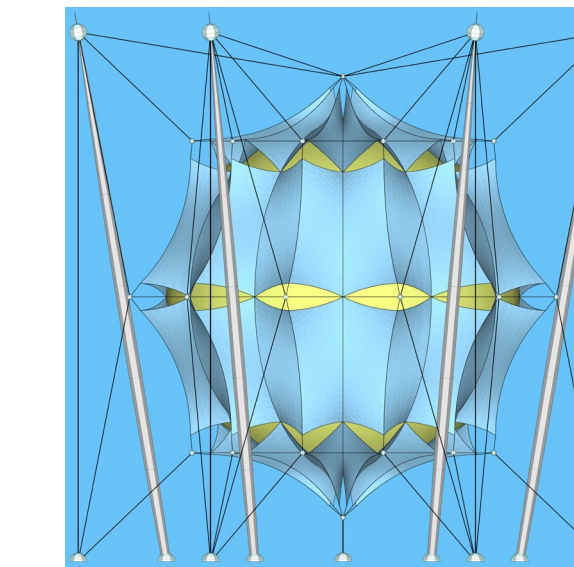
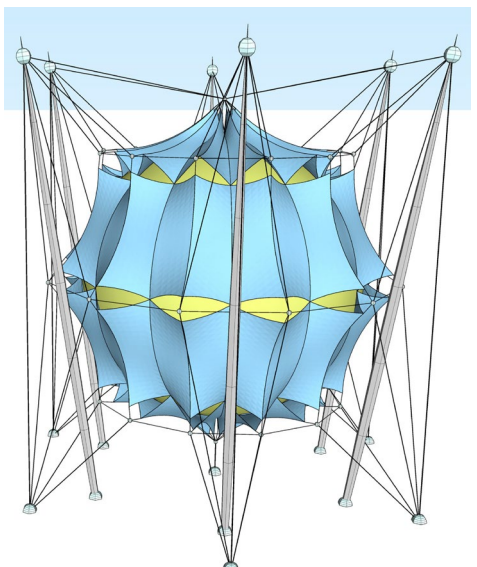
6. MOUNTAINSPHERE = framed by mountain

Central sphere representing coastal range vegetation enveloped by pleated earthen membrane. Mast & Cable external support structure.



7. FORESTSPHERE = nearby woodlands

Timber structure enveloped by pleated leafy membrane. No internal sphere. Radial Strut internal support structure.



8. TECHSPHERE = boundless technology

Central sphere representing eco tech enveloped by pleated 'blue-sky' membrane. Bifacial PV on pleated surfaces with reflecting surfaces within the sphere generate net zero energy.