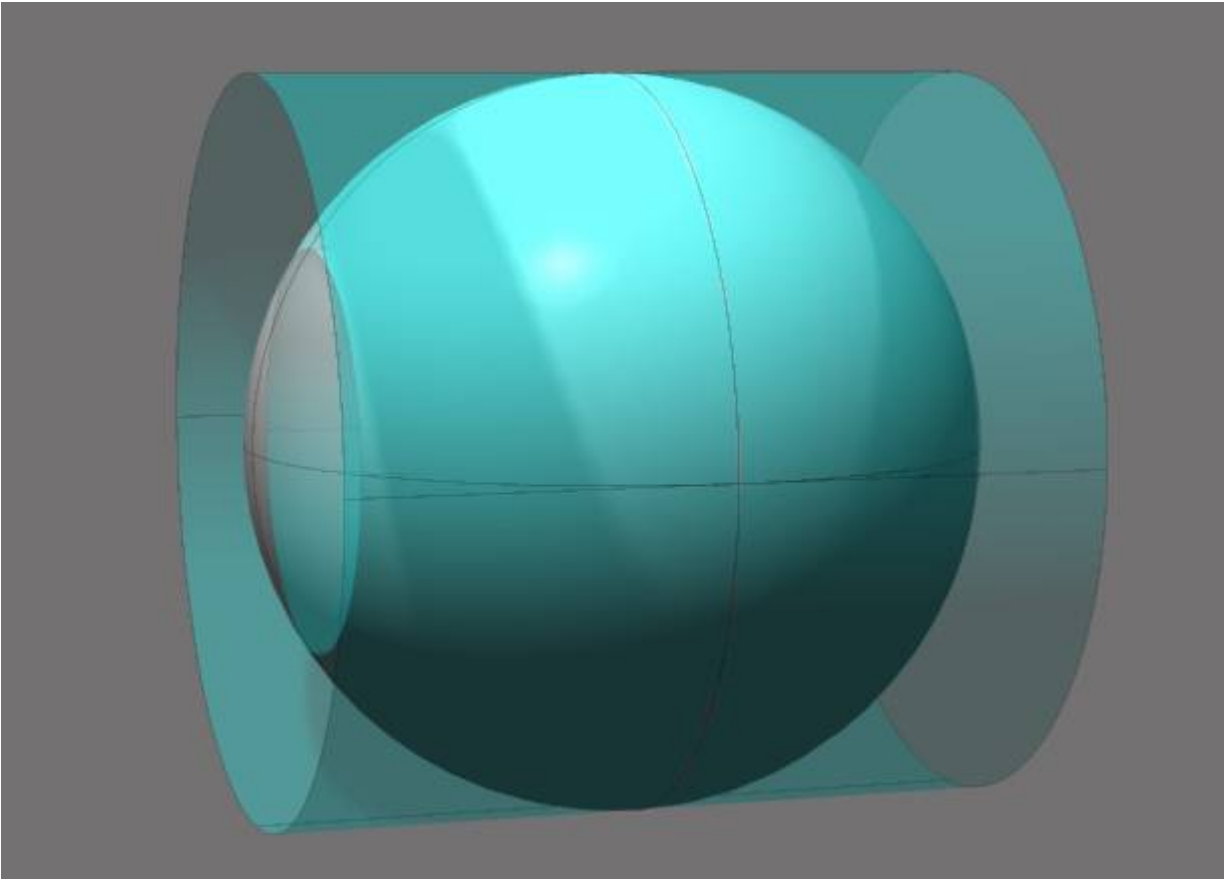


The Archimedes Sphere – Selling Space in Space  
Upper Stage Space Habitats for Near Term Space Tourism and Space Port Operations

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Inflatable spherical pressure vessels with twin opposable hatch rings connected by four cables can be preinstalled into the tops of pressurized fuel tanks of the upper stages of conventional launch vehicles, greatly simplifying their design by protecting them from the harsh open space radiation environment. This allows for the on orbit recovery, stabilization and reuse of launch vehicle upper stage spacecraft which would otherwise be discarded to prevent further space debris. Spheres also solve the immediate problem of unloading paying space tourism passengers from the Dragon spacecraft upon reaching orbit, by simply docking with the upper stage port hatch interface, thereby creating an instant space station.