Import["https://github.com/JonathanGorard/Gravitas/raw/main/MetricTensor.wl"]
Import["https://github.com/JonathanGorard/Gravitas/raw/main/ExtrinsicCurvatureTensor.wl"]
Import["https://github.com/JonathanGorard/Gravitas/raw/main/ADMDecomposition.wl"]
Import[

"https://github.com/JonathanGorard/Gravitas/raw/main/DiscreteHypersurfaceDecomposition.wl"]

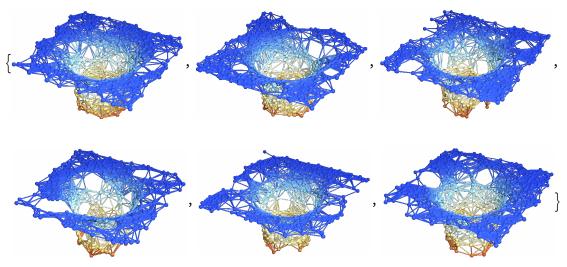
In[15]:= decomposition = DiscreteHypersurfaceDecomposition[

MetricTensor[{"Schwarzschild", 1}, {t, r,  $\theta$ ,  $\phi$ }], {t, 0, 1}, {r, 0, 4}, { $\theta$ , -Pi, Pi}, 400, 1.2]

Out[15]=

DiscreteHypersurfaceDecomposition Time Coordinate: t Vertices: 400 Discretization Scale: 1.2

 $\verb||n[16]|= decomposition[{"CoordinatizedPolarGraphEvolutionColored", 5}]|$ 



MetricTensor[{"Kerr", 1, 1/3}, {t, r,  $\theta$ ,  $\phi$ }], {t, 0, 1}, {r, 0, 4}, { $\theta$ , -Pi, Pi}, 400, 1.2]

decomposition2 = DiscreteHypersurfaceDecomposition[

decomposition2[{"CoordinatizedPolarGraphEvolutionColored", 5}]