

# Computational Project 1

## Cube-sphere

The task is to take a cube-sphere and compute partial derivatives of a 3-variable function at the vertices. The function will be specified by an image.



First I take the desired image and convert it to the corresponding 6 faces of the cube-sphere. I do this by taking the coordinates of the vertices of the desired cube-sphere in 3D and converting them to 2D spherical coordinates which then I use to sample the image.

