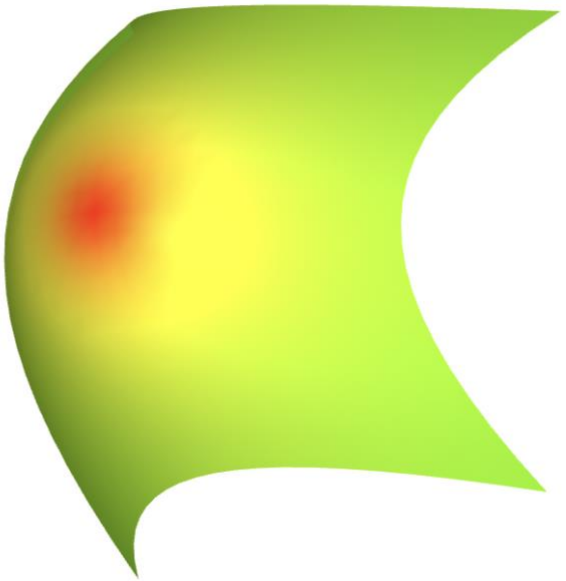
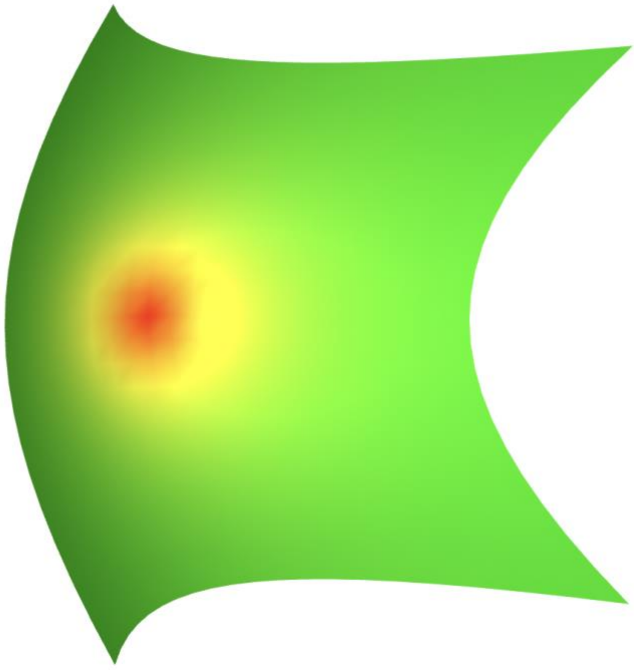
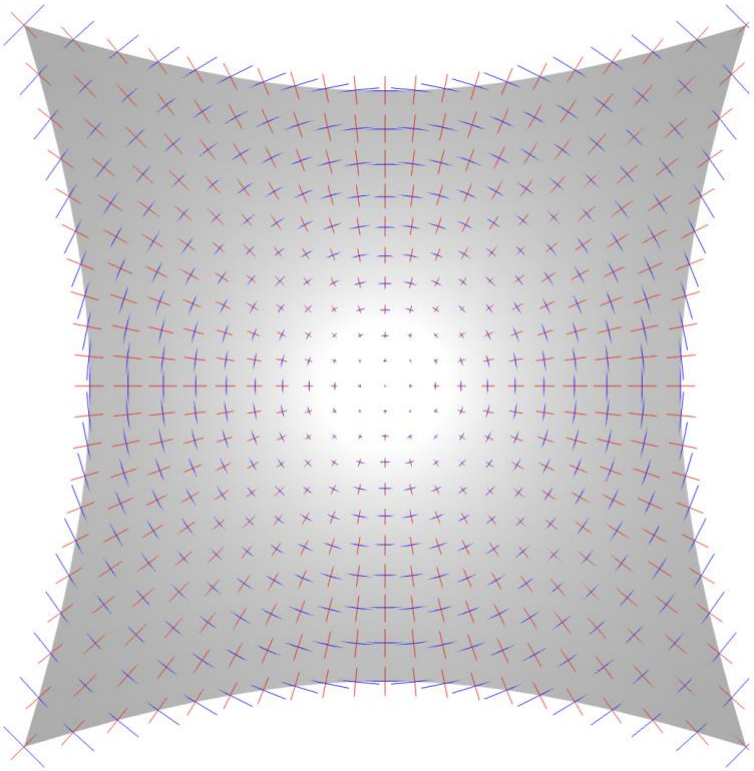
Order of images is the same for all cases
1. Gaussian curvature
2. Mean curvature
3. Principal directions
4. Asymptotic directions

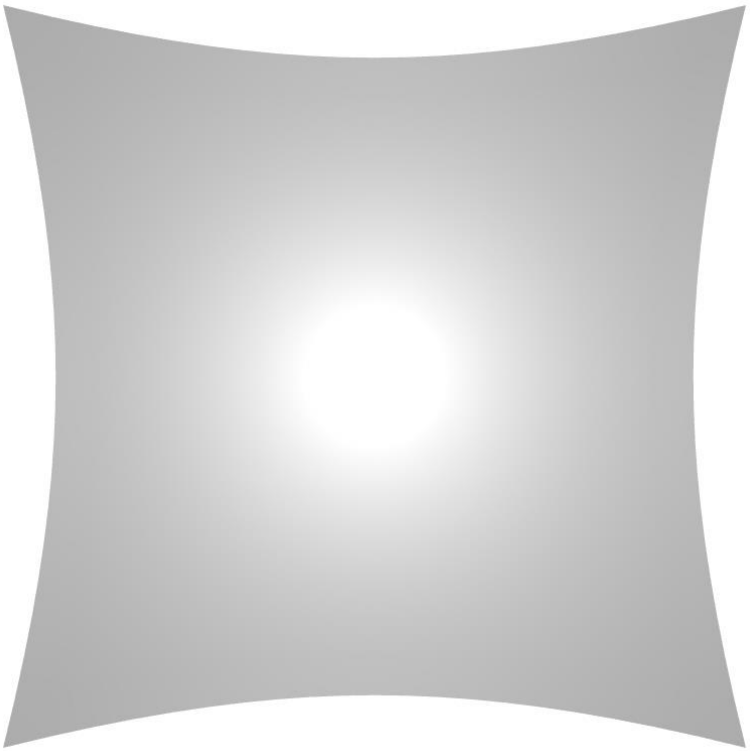
Paraboloids

K > 0 (a=b=1, c=d=e=0)

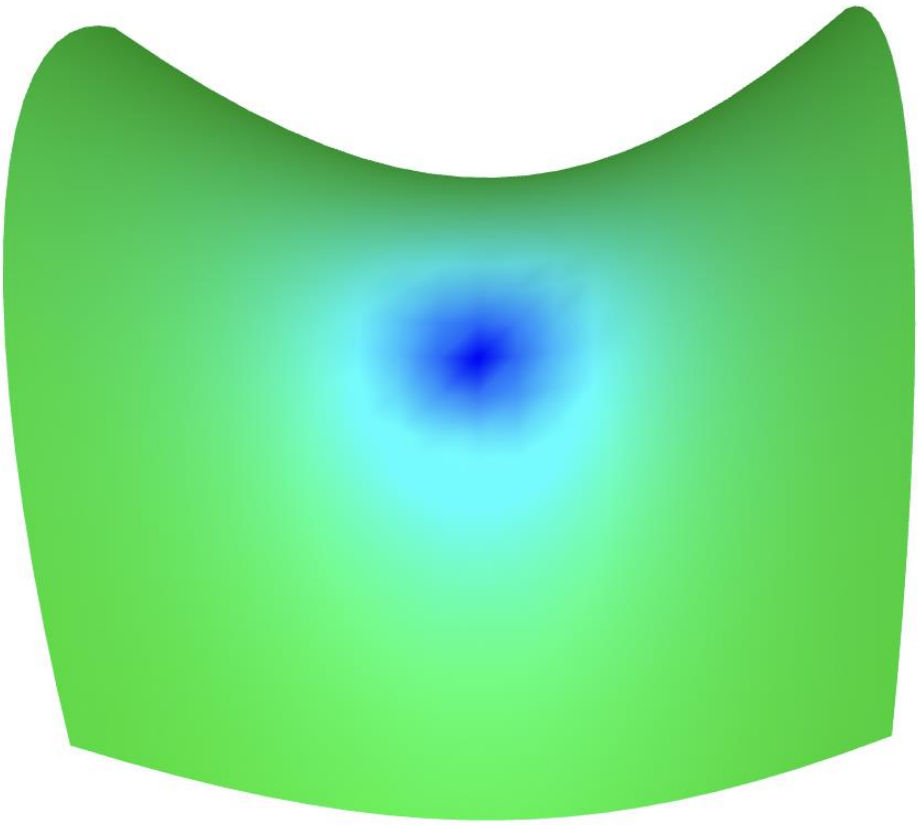


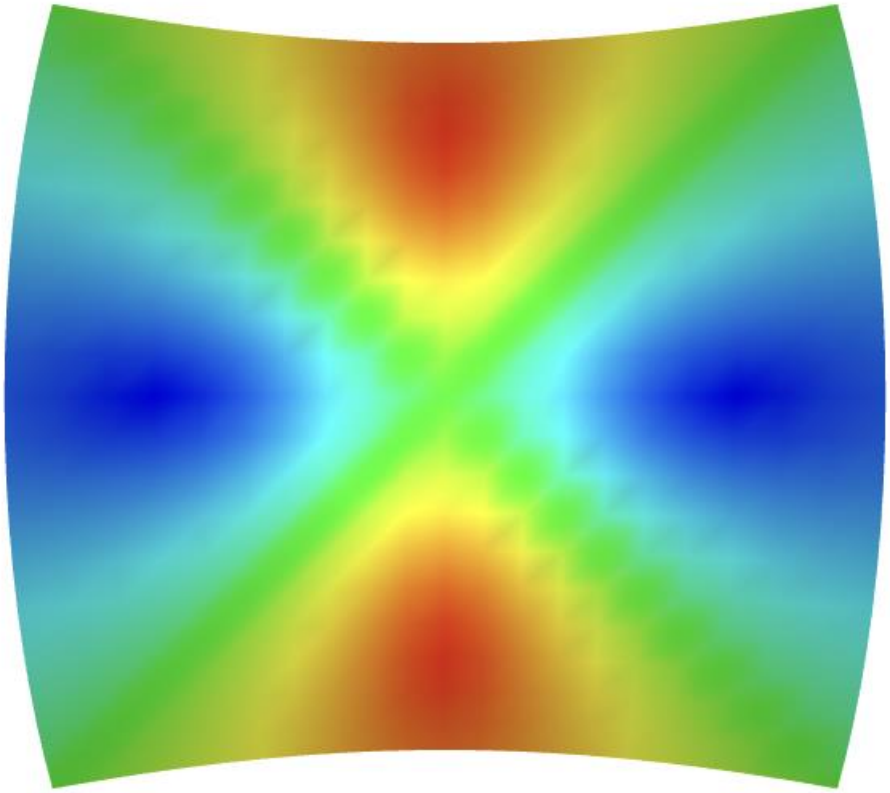


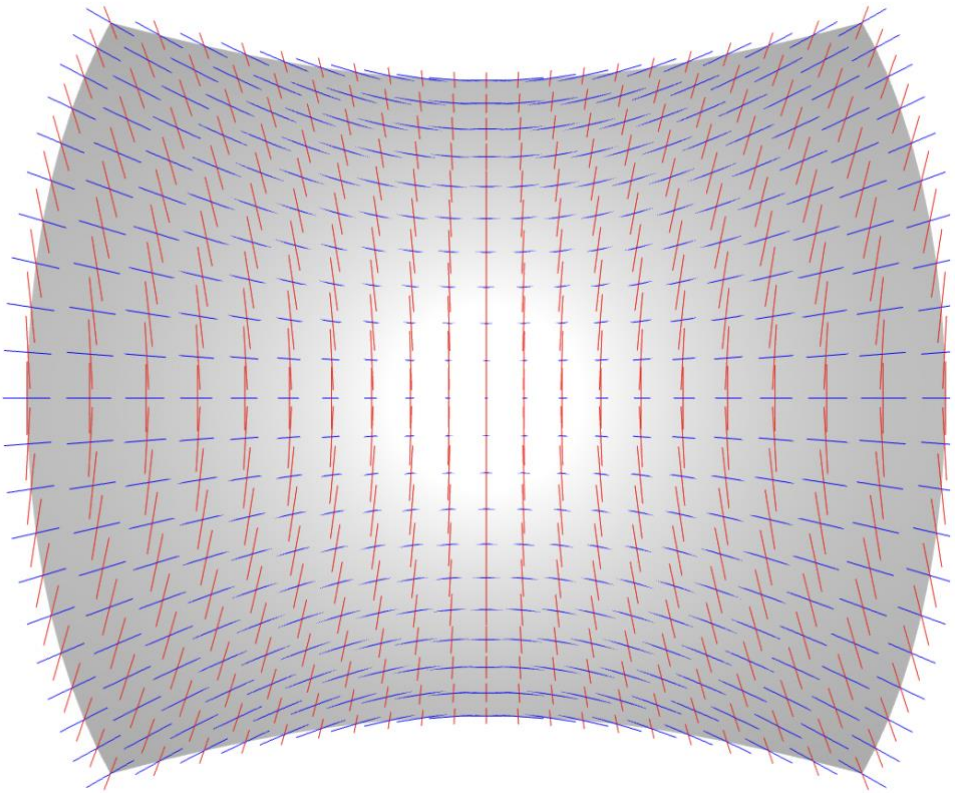


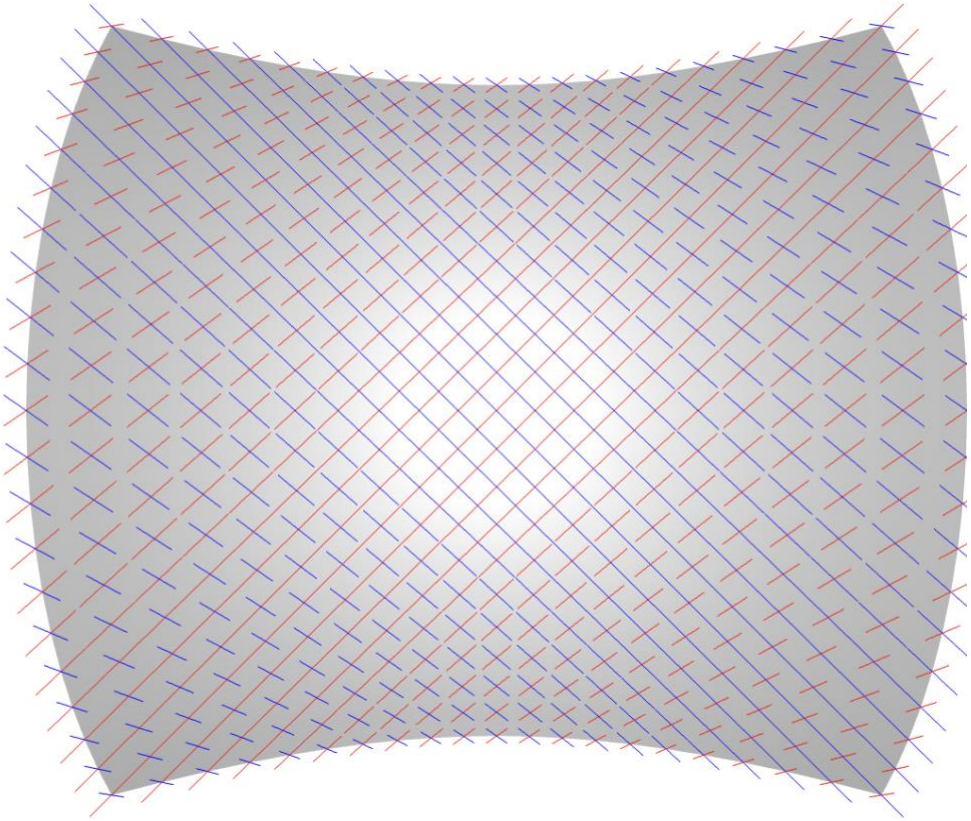


K < 0 (a=1, b=-1, c=d=e=0)

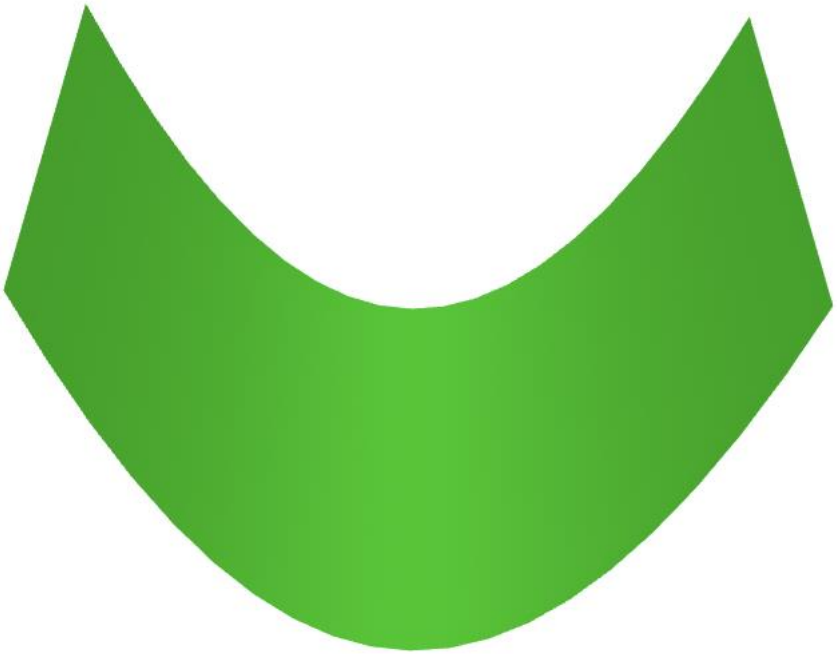


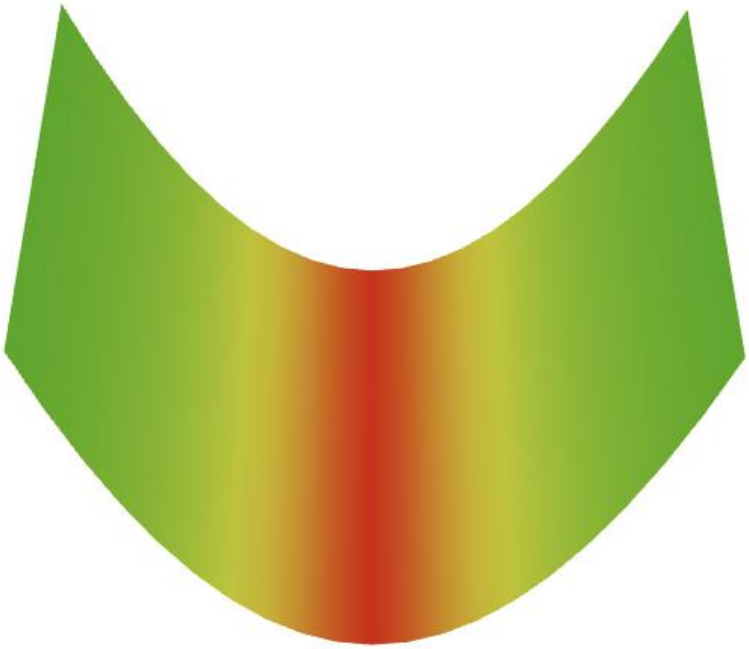


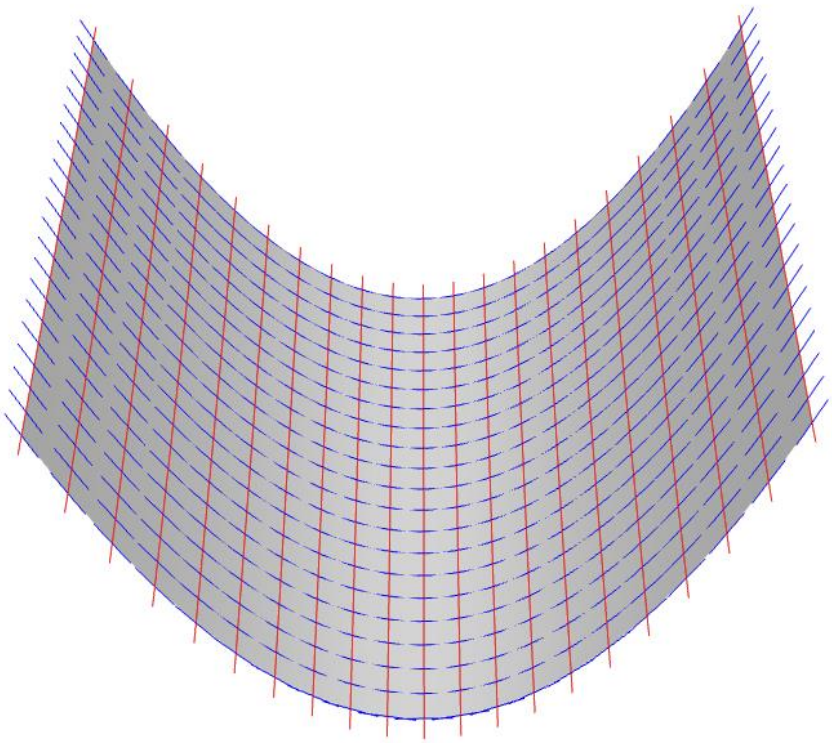


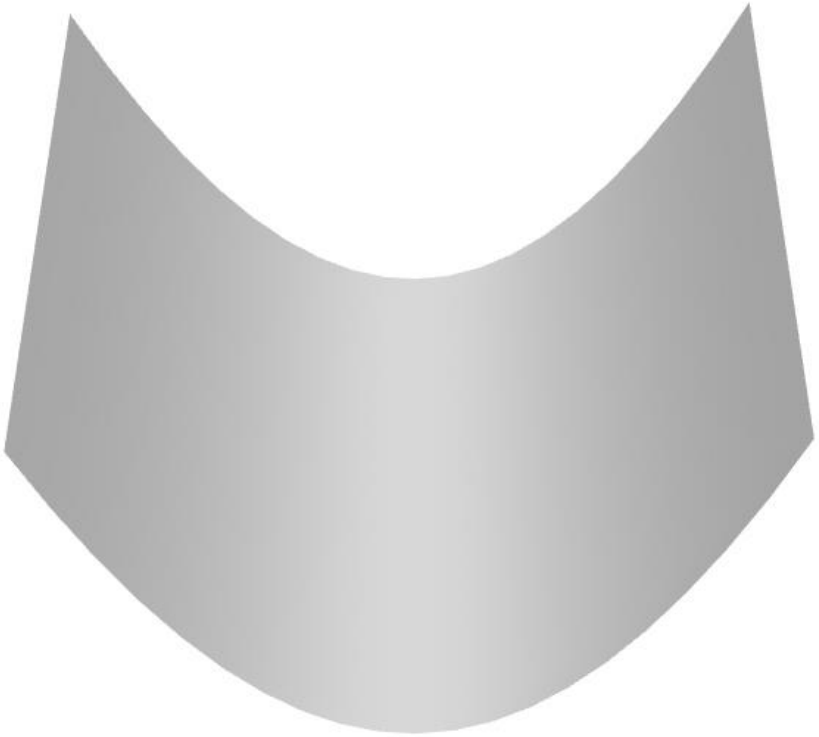
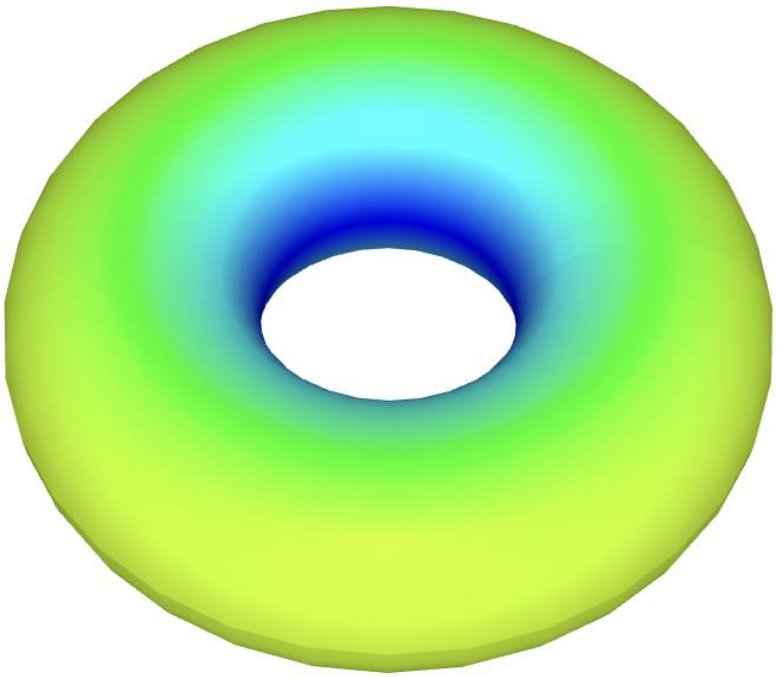
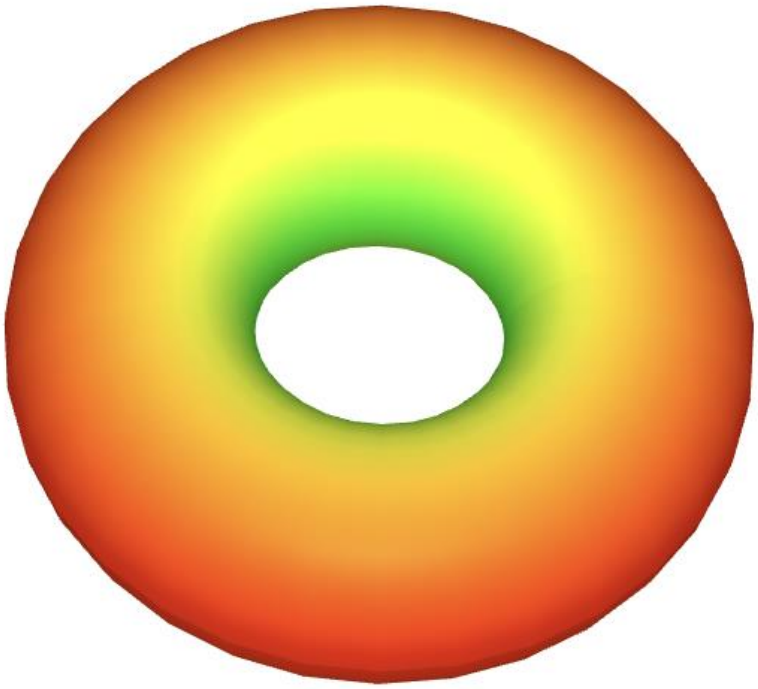
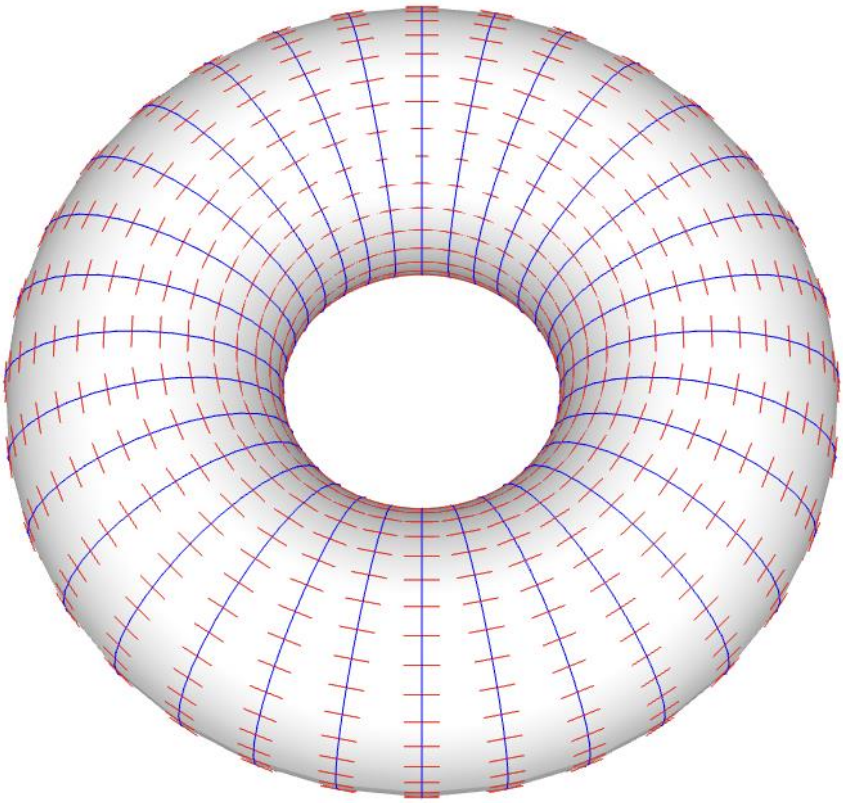
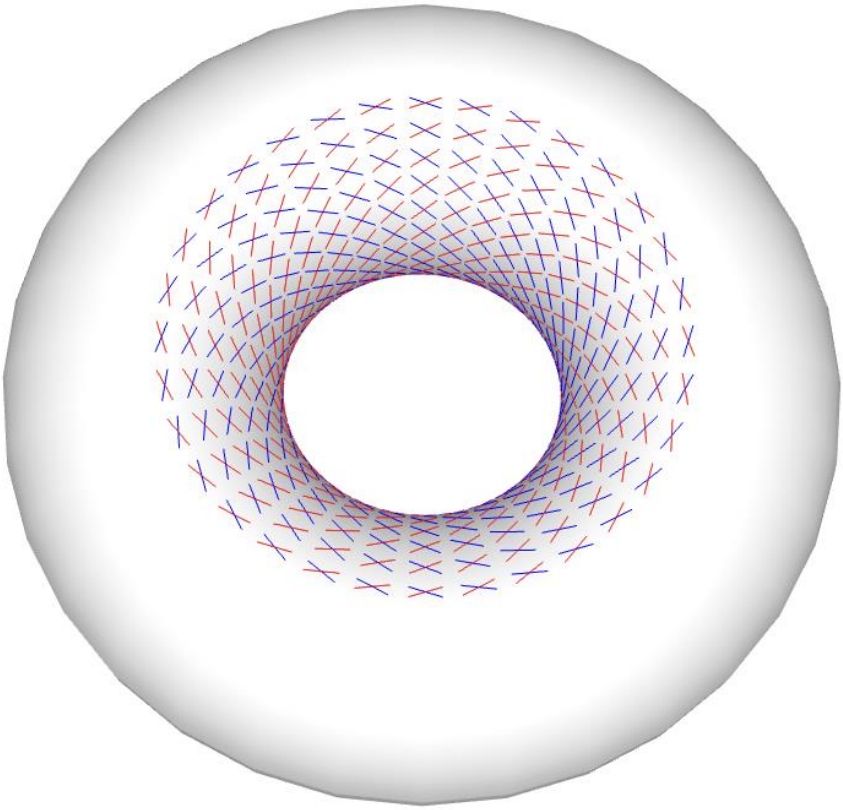


K=0 (a=1, b=0, c=d=e=0)









Torus