

Fig. 1: This figure shows the power radiated as a function of the polar angle θ . The positive z-axis points in the direction of zero degrees. The instantaneous electron velocity is also in this direction. The direction of the acceleration is in either the + or - x-direction. And the image is a a cross section of the power radiated at $y = 0$. We can see that as the speed gets closer to the speed of light, the power radiated is largely in the direction of the velocity. Also the curves are scaled such that the values of the curves at zero degrees is the same.

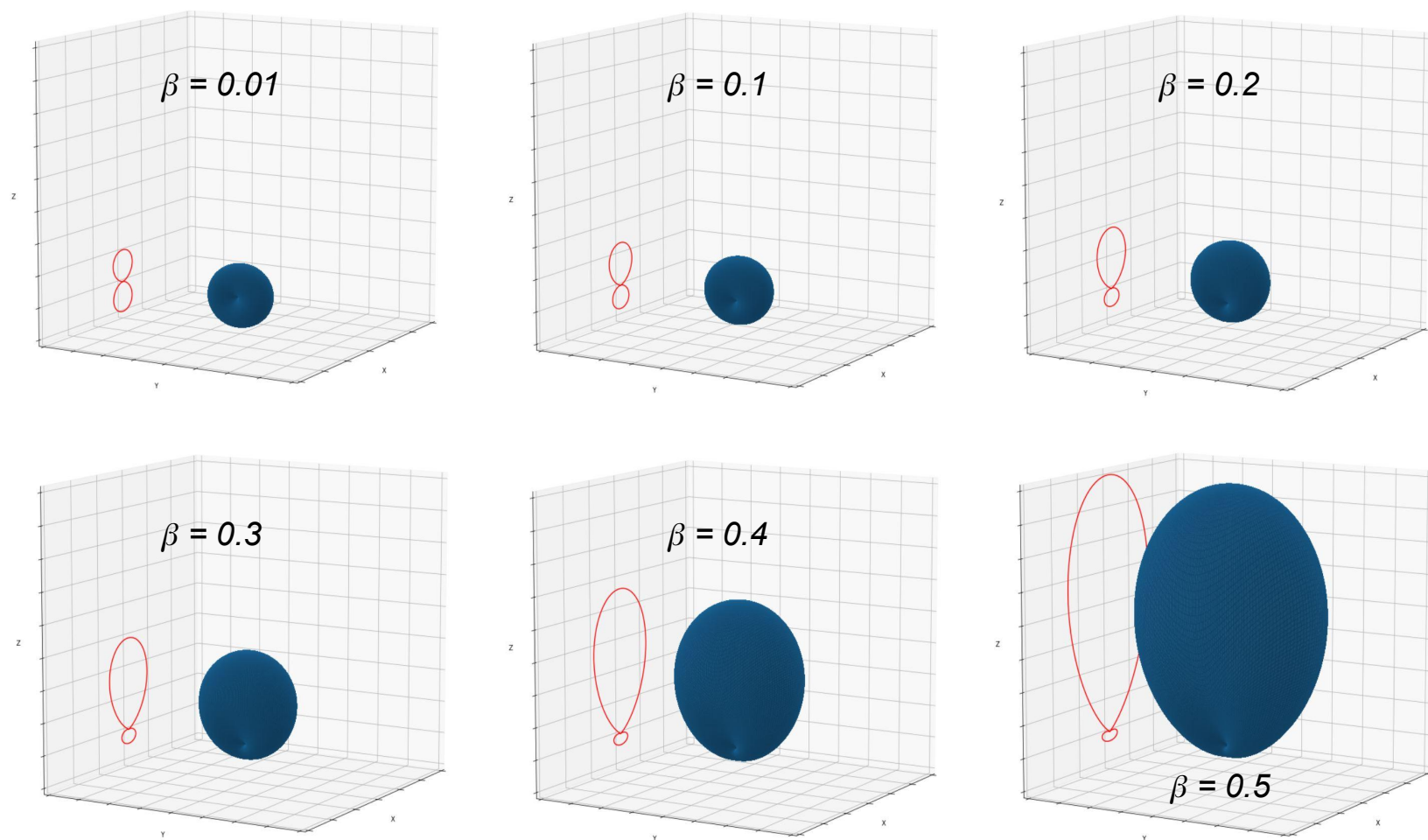


Fig. 2: This figure shows a set of 3D plots of the derivative with respect to the solid angle of the total power radiated. The blue figure is a surface plot that represents the total power radiated per unit solid angle. The red line is a projection of the cross section of the figure taken at $y = 0$, which is similar to what figure 1 shows. In this image, the electron velocity is in the positive z direction. The acceleration of the electron is in either the + or - x-direction.