# THE ORBITSPHERE - LATITUDINAL FLUX (also could be called "*azimuthal flux*")

As further exploration of the intricacies of the motions of charged sub-elements of the Orbitsphere, we here discuss the *Latitudinal Flux* of the Orbitsphere - that is - if we were to consider the Orbitsphere to be a globe with a North Pole (the point on the sphere obtained by moving from the nucleus in the direction of the Orbitsphere's net angular momentum vector), a South Pole, an Equator, parallels of Latitude and circles of Longitude, we seek to calculate the amount of charge flowing along the parallels of Latitude.

Initially, we show an x-y-z coordinate system which is right-handed, meaning that, compared with a right hand with the fingers outstretched, the thumb points along the x-axis, the other four fingers indicate the direction of the y-axis, and the palm is facing along the z-axis.
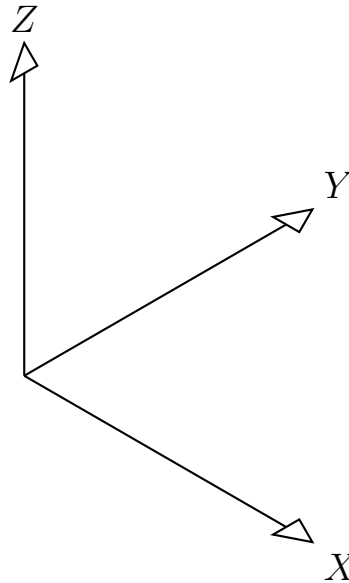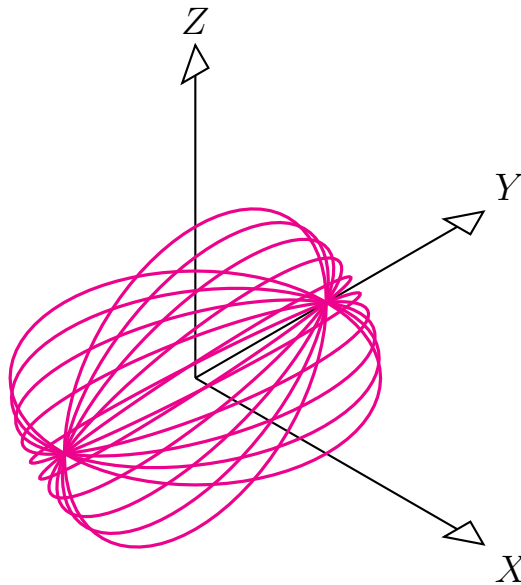

Figure 1: *A right-handed coordinate axes set.*

Next, we show a single Great Circle of flowing current in the xy-plane. The nucleus is taken to be at the origin.
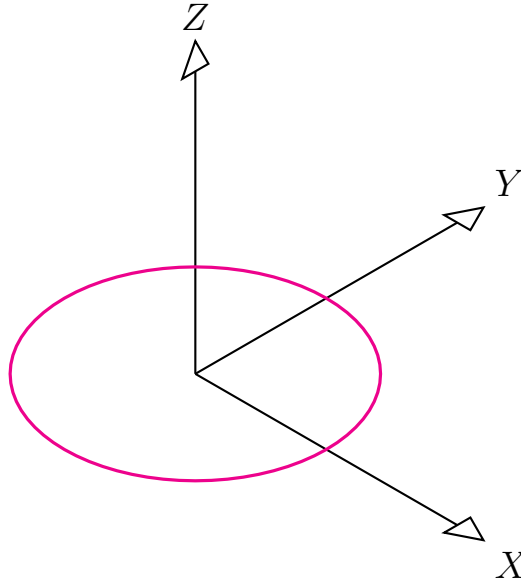
Figure 2: *Right-handed coordinate axes set with single Great Circle of current in xy-plan. This will be the "equator" of the Orbitsphere.*

Next, we perform Residue of this Great Circle about the y-axis and we obtain Figure **??**.

Figure 3: *Image generated from Residue Rotation through 90° about y-axis of the Great Circle in Figure **??**. The image somewhat resembles a pushed-in short slinky. The pitch angle was 10°.*

Figure **??** is like Figure **??** except that the pitch is 30° rather than 10°. The image of Figure **??** is used to generate the Orbitsphere shown in Figure **??**.
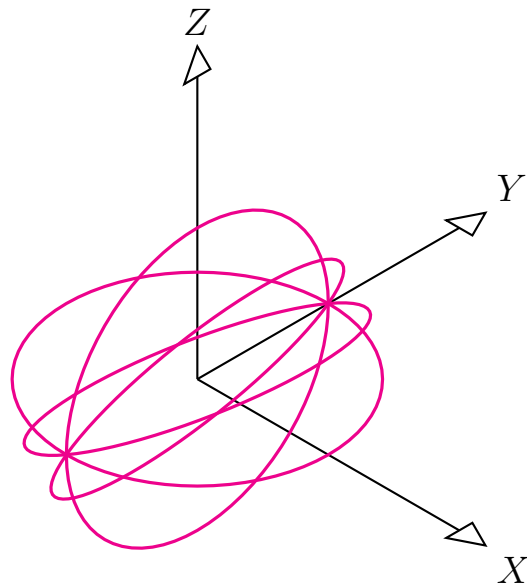
Figure 4: *Image generated from Residue Rotation through 90° about y-axis of the Great Circle in the xy-plane using pitch angle of 30°.*
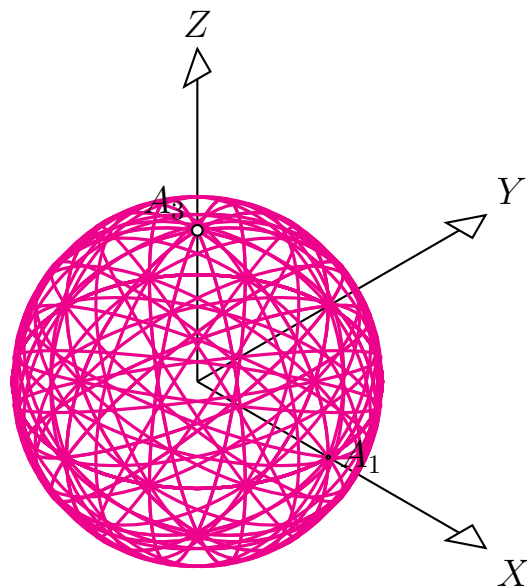
Figure 5: *Orbitsphere generated from Residue Rotation through 360° about z-axis of the image of Figure **??** using pitch angle of 30°.*

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