Complexifying The Equation:

The Modified Wave Equation is seen below:

![Text, letter

Description automatically generated]()

(Note that the .stl file has been renamed to JNN3DPrint.stl)

The original base equation has been modified heavily, however, we can still observe interference patterns of the multiple waves. There were a few problems initially in dealing with this equation. Because of all the products of terms in , we would obtain a very ‘spiky’ surface (or we would have waves on waves), which was dealt with by modifying the mesh-grid and multiplying within the sine (and exponential) functions by a small fraction. The sine term with the equation within it gives the circular pattern below (see figure), and by including the arctan functions, we were able to create the lines which ‘separate’ or ‘section’ the surface into regions.

![A close-up of a hand

Description automatically generated with low confidence]()