

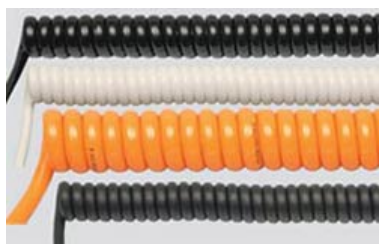
Geometric Tools for Computer Graphics - MIRI

Lab exercise 2

Year 2019-2020 Q1

Choose one of the following two options:

1. Old home telephones used cables like the ones in the left figure below. Parameterize such a cable and visualize your parametrization. Recall that the section of the cable must be circular. Can you make your cable to appear like in the right figure below?



2. We want to produce an animated valentine. It will consist of a heart entering the scene and moving along a spiral trajectory until it reaches the center of the screen. We want to do something better than what you can see in the figure. Our improvements will be at least two. First, our heart will not stay vertical at all times: it will change its orientation (i.e., rotate) depending on its position along its trajectory. Of course, it will end its trip in vertical position. Second, our heart will increase its size as it gets closer to its final destination. *Observation.* Sage allows animations, see: <http://doc.sagemath.org/html/en/reference/plotting/sage/plot/animate.html>

