Import turtle, math libraries
Set colormode to 255

Create panel
w=700
h=700
Setup panel with w and h
Set panel color to black

Create turtle para
Create turtle arrow
Set para speed to 15
Set arrow speed to 10


Set para color to rgb for neon green (**57, 255, 20)**
Pick up pen

copy code from [https://canvas.colorado.edu/courses/75648/pages/parametric-patterns] for funky spiral

Create variable a for random constant in equations (from 25 to 40)
Create variable b for random second constant in equations (from 20 to 30)

Create variable scale for scale of pattern, make it random from 30 to 30
Create iterate variable (2) for two iterations

Create range of angles (0-180) (ANGLES)
Create range of angles (180-360) (ANGLES2)

For I in range (iterate):
        for angle in ANGLES:
                Convert angles to radians (angle)
                solve for x: angle - 1.6 * cos(a*angle)
                Solve for y: angle - 1.6 * cos(b*angle)

                multiply x by scale and assign to x to make image larger
                multiply y by scale and assign to y to make image larger
                go to (x,y)

        for angle in ANGLES2:

Convert angles to radians (angle)
solve for x: angle - 3.2 * cos(a*angle)
Solve for y: angle - 3.2 * cos(b*angle)

multiply x by scale and assign to x to make image larger
multiply y by scale and assign to y to make image larger
go to (x,y)
change a variable to -a multiplied by iterate
change b variable to -b multiplied by iterate
Pick pen up

Go to (-50,-75)
Define variable arrows (19)
Put arrow pen down
Change shape to "arrow"
Change color to blue

for I in range(arrows):
    change turtle shape to "Arrow"
    move turtle right (50)
    stamp shape
    move turtle left (50)
    rotate turtle (20) degrees

Add code from Taylor Dupuy
cleanup(use turtle.done())