

**Golden Ratio vs Fibonacci Sequence
with Fractal Geometry Added**

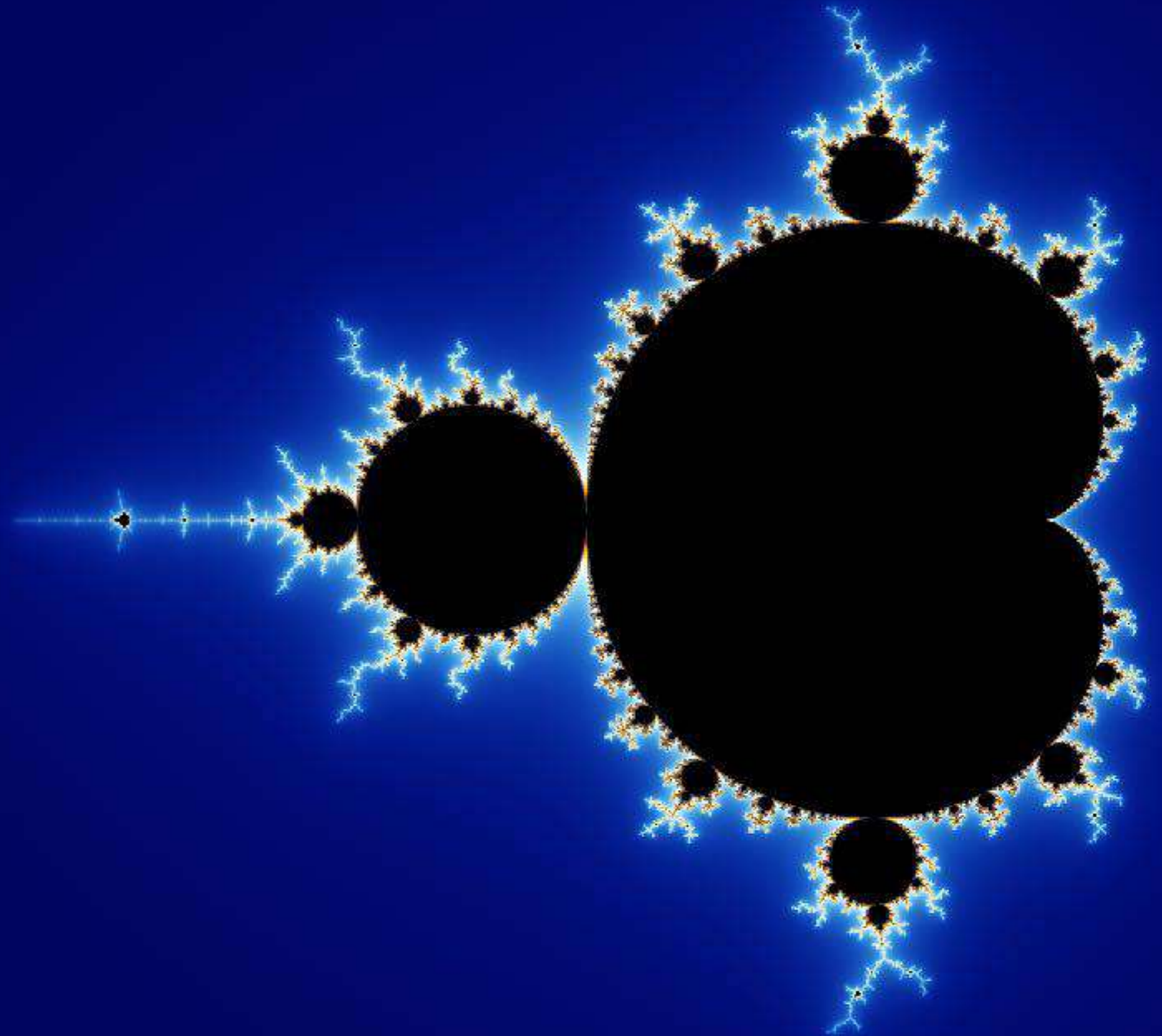
Fractal Geometry

Fractals are complex patterns that are self-similar, and therefore exhibit similar patterns at every scale. Fractals can be patterns or shapes that are non-regular and differ from traditional geometric shapes, but occur very commonly in nature, such as clouds, mountains, trees and snowflakes. The most well-known illustration of fractals is the Mandelbrot set (seen here), which when magnified simply shows repetitions of the same pattern, making it hard to determine the level of magnification due to the recurring patterns.

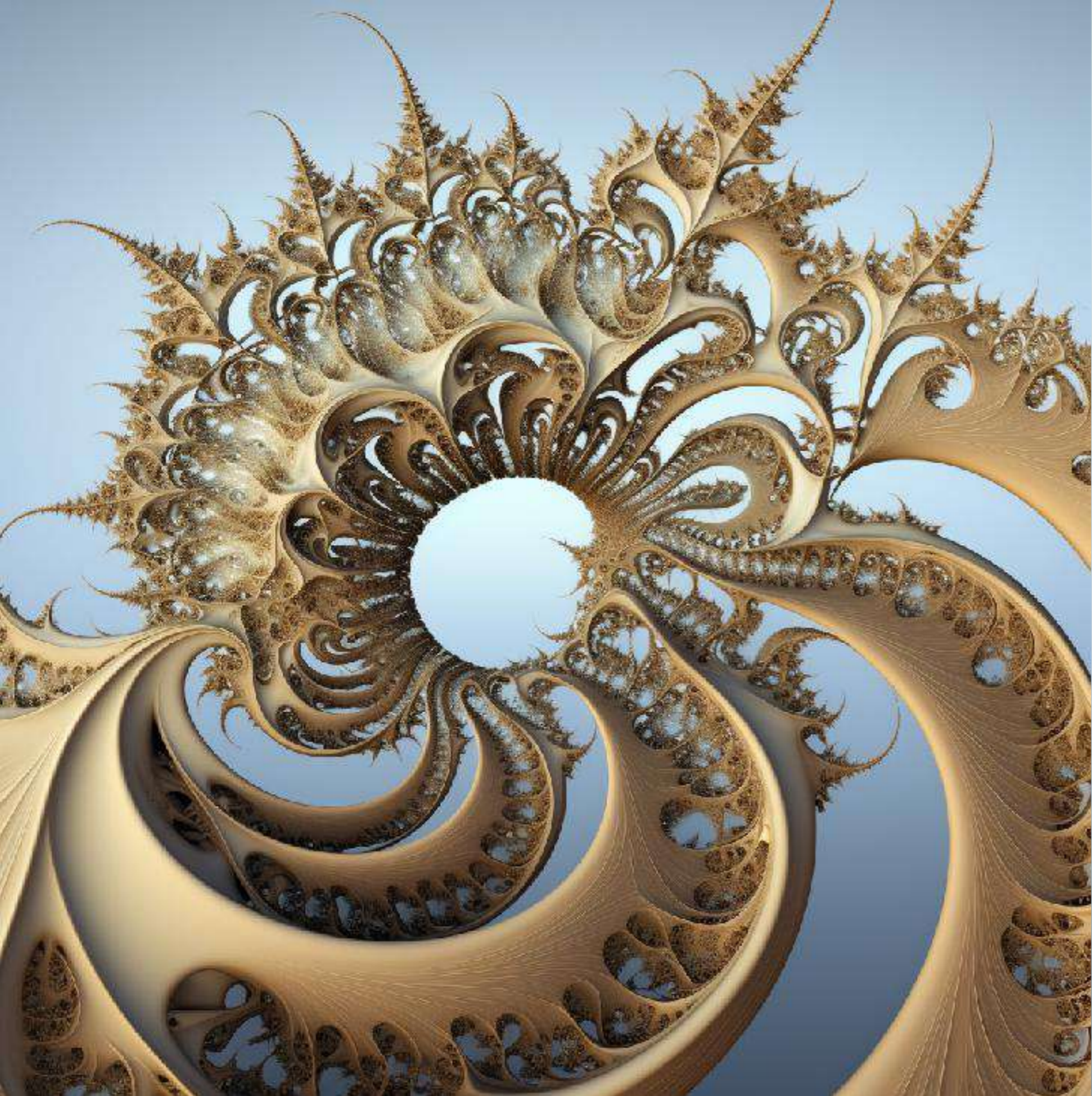
$$z_{n+1} = z_n^2 + c$$

A couple examples of fractal formulas

$$z_{n+1} = \sqrt{\frac{z_n^2 + c - 1}{2 * z_n + c - 2}}$$



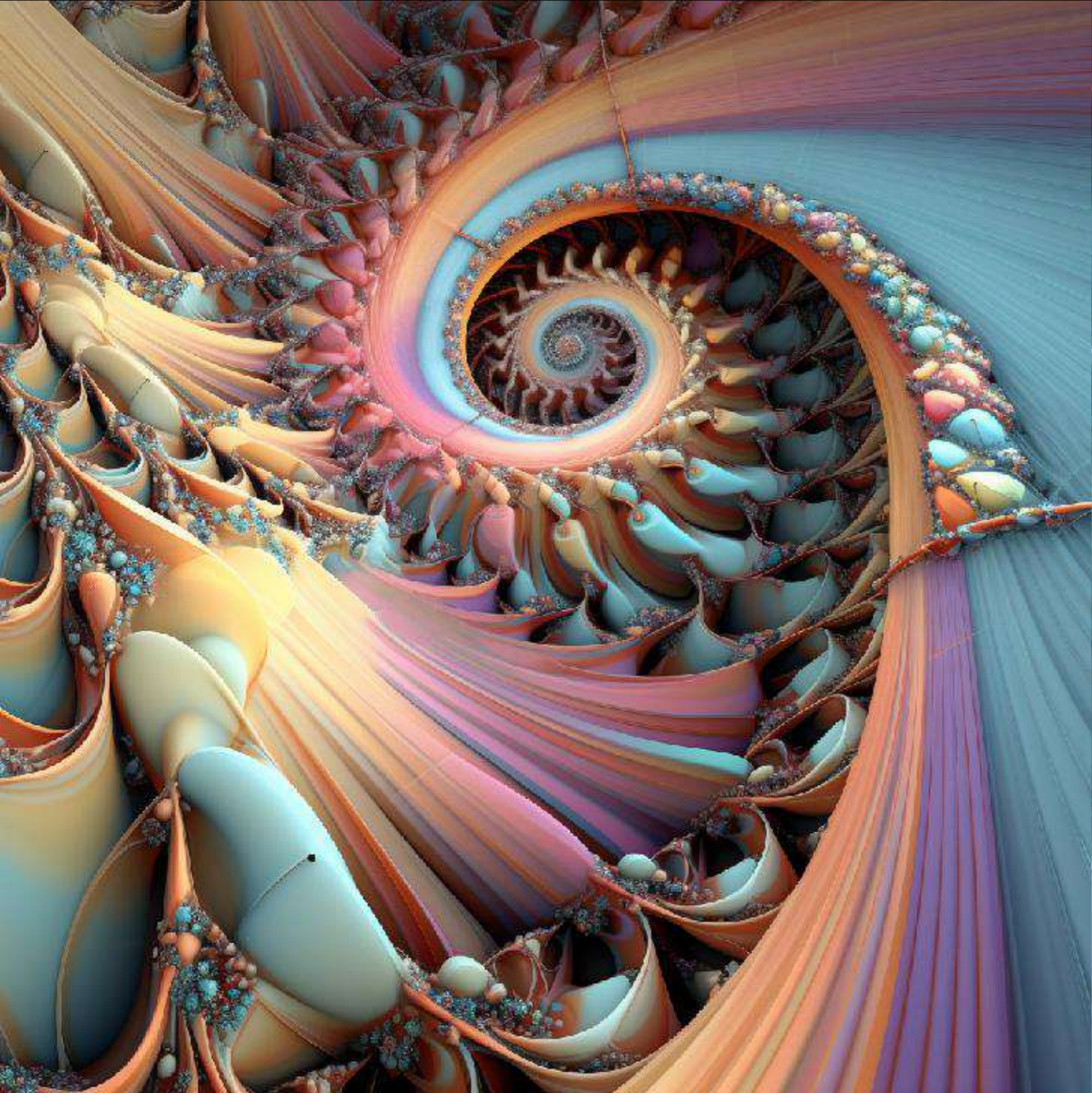
As you'll see on the next pages, MJ know what a fractal looks like and how it effects the image when in the prompt



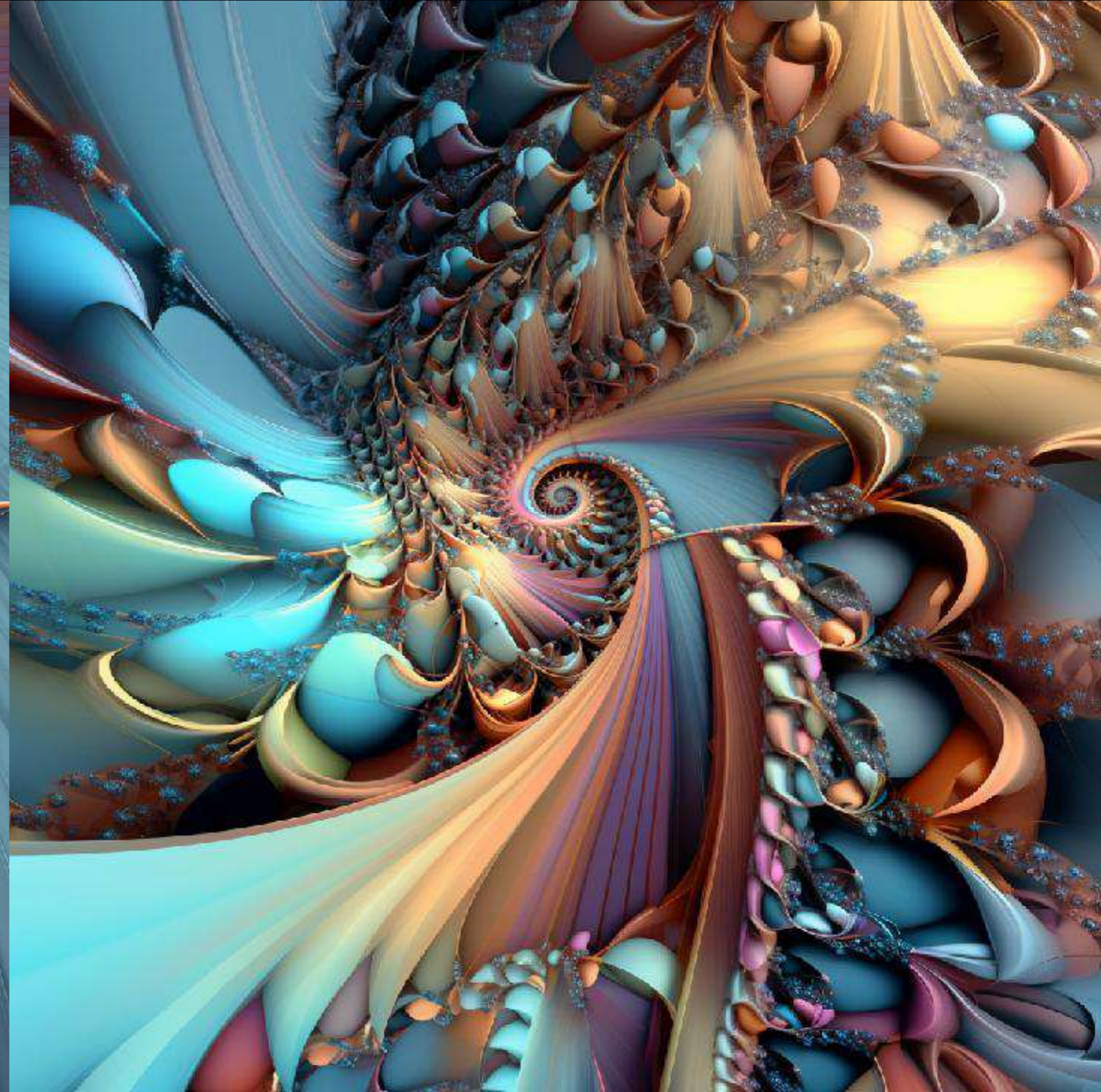
Prompt: fractal juliaset --s 50



Prompt: a deciduous tree shaped using a fractal formula --s 50



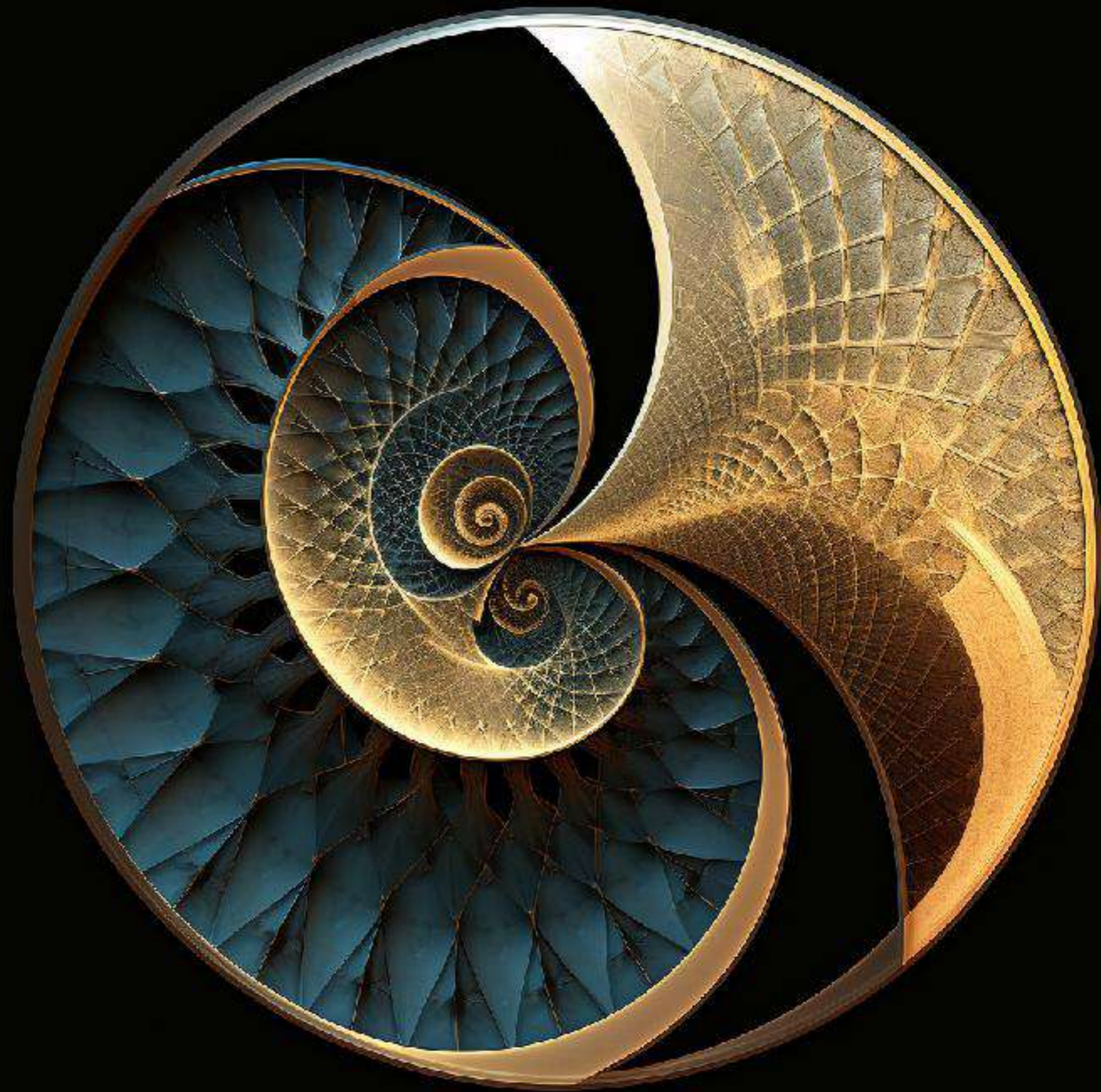
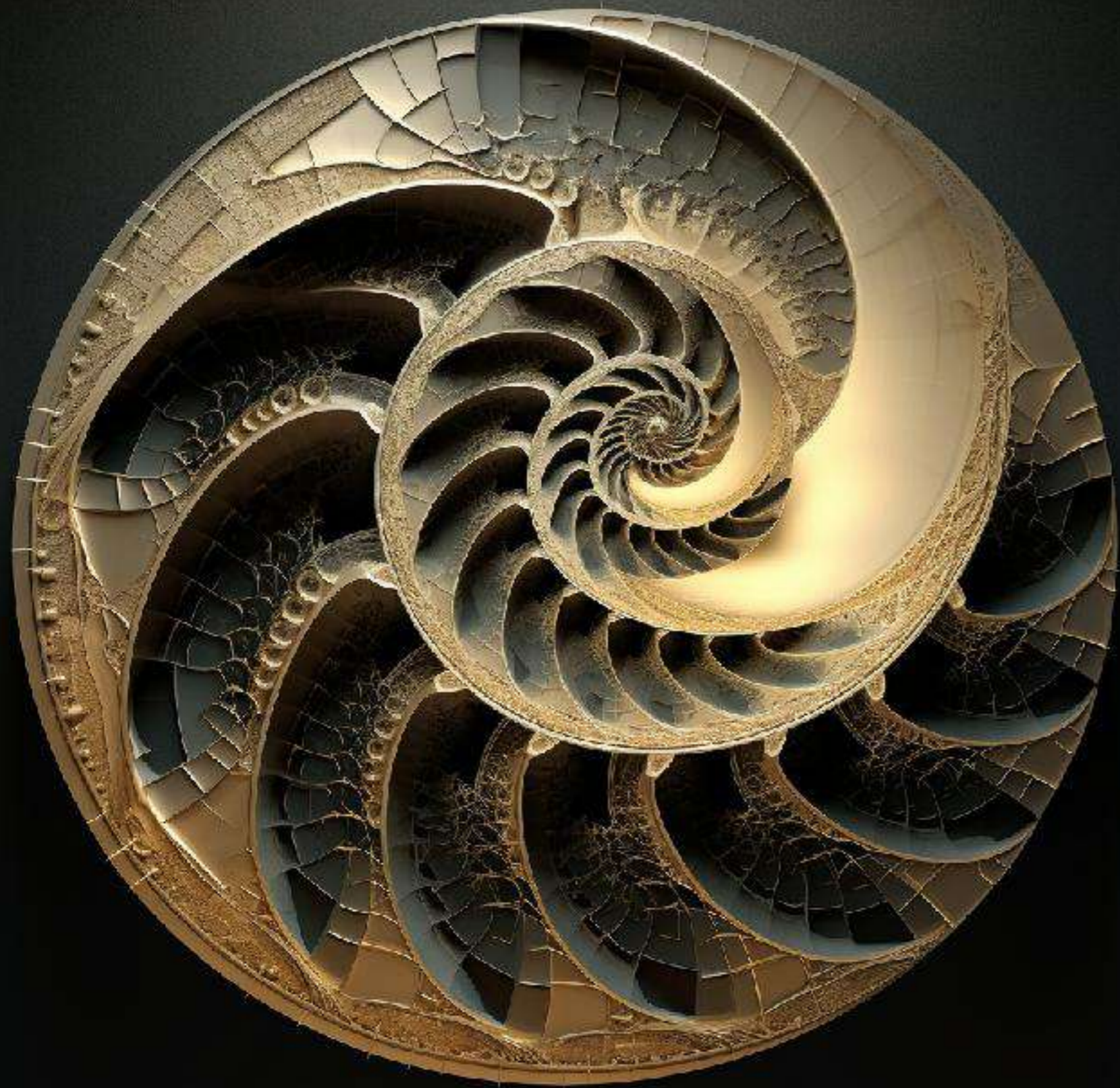
Prompt: fractal juliaset --s 50



Prompt: Zoom Out 2x twice



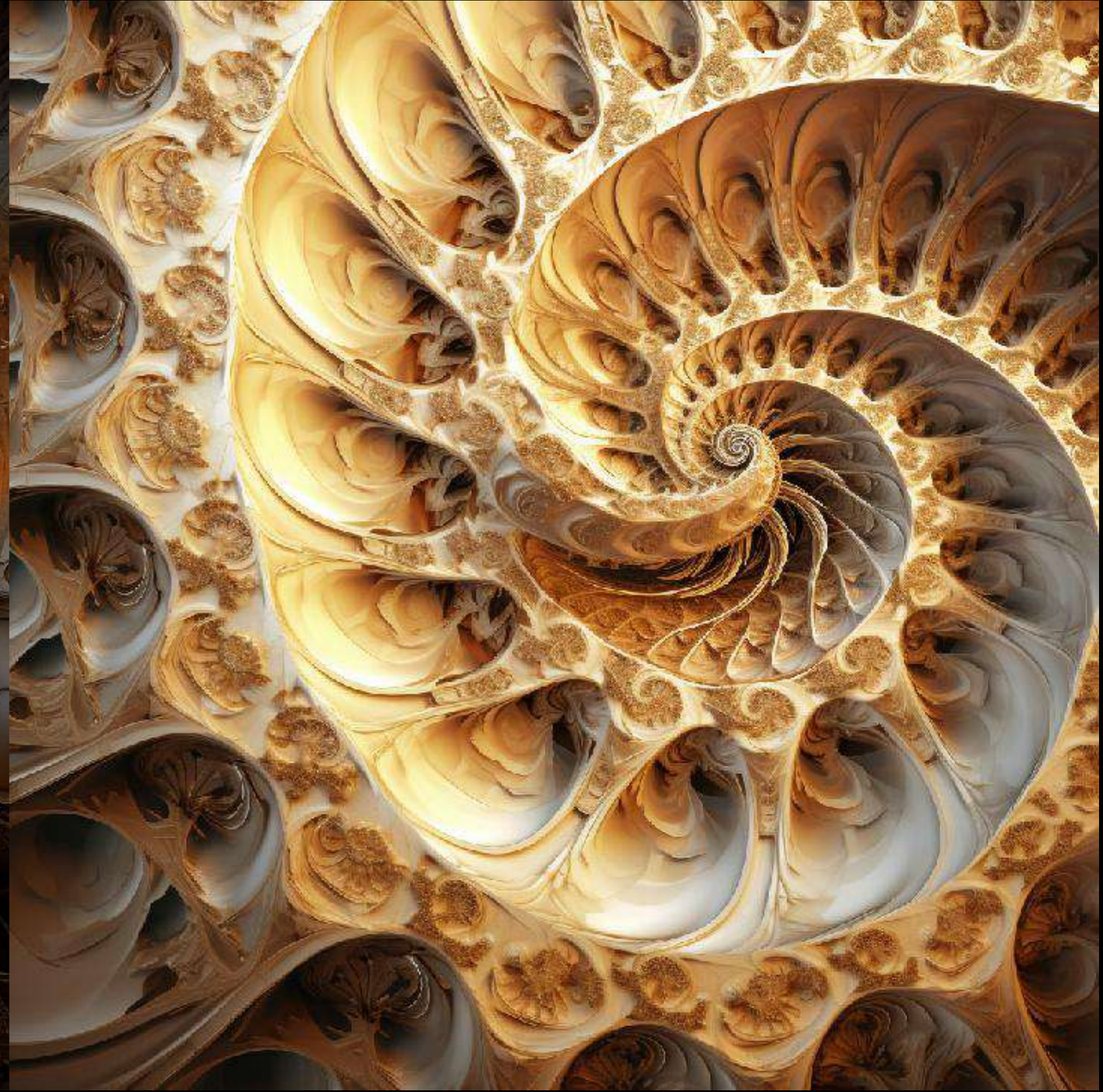
Prompt: golden ratio fractal geometry --s 50



Prompt: golden ratio fractal geometry --s 50



Prompt: Fibonacci Sequence fractal geometry --s 50



Prompt: Fibonacci Sequence fractal geometry --s 50



Prompt: Fibonacci Sequence fractal geometry --s 50