

The background of the image features a complex, abstract pattern of rippling waves. These waves are composed of numerous thin, light blue lines that create a sense of motion and depth. They are set against a dark, almost black, background which provides a strong contrast. The waves are not perfectly uniform; they vary in frequency and amplitude, creating a natural, organic feel.

Rippling waves

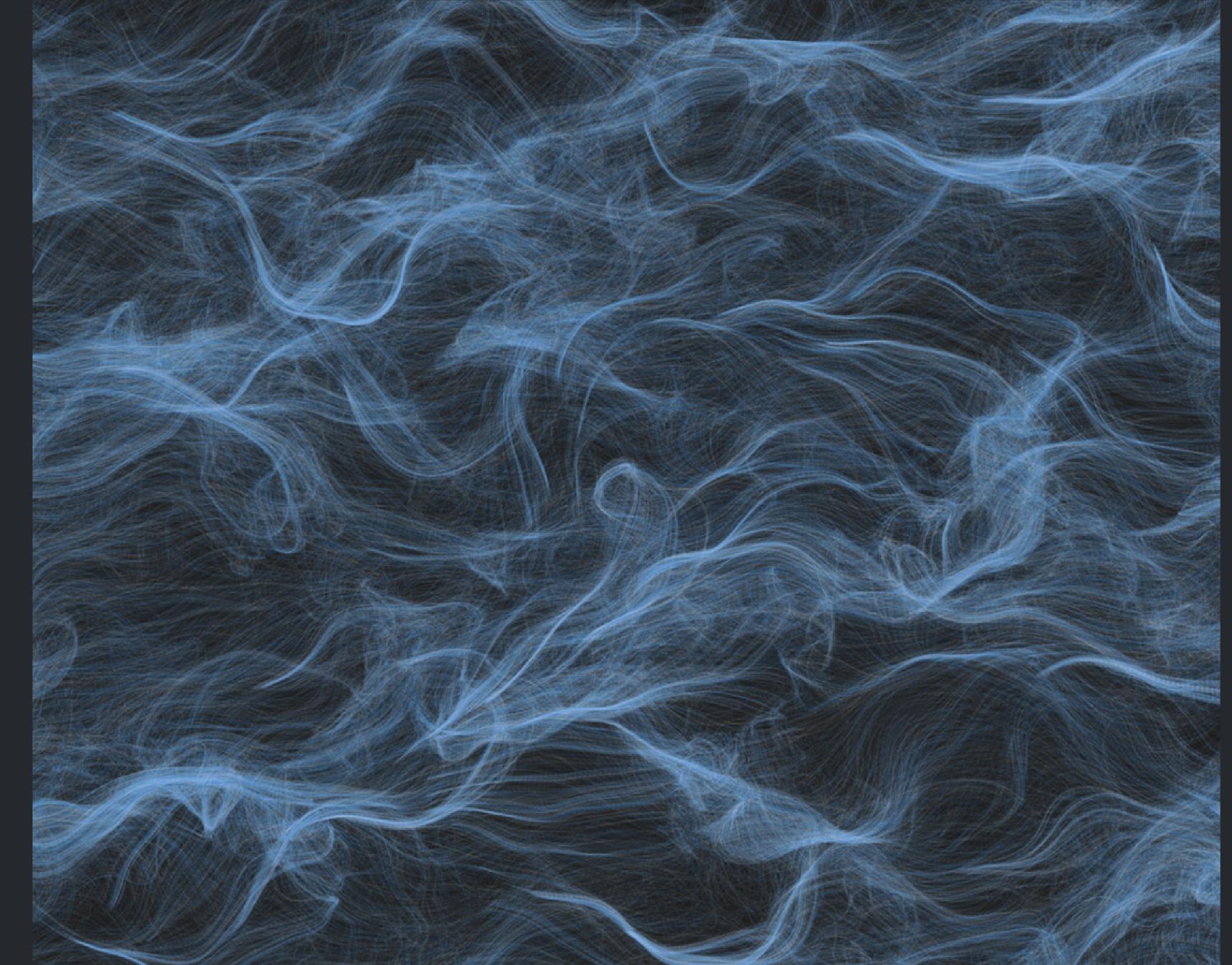
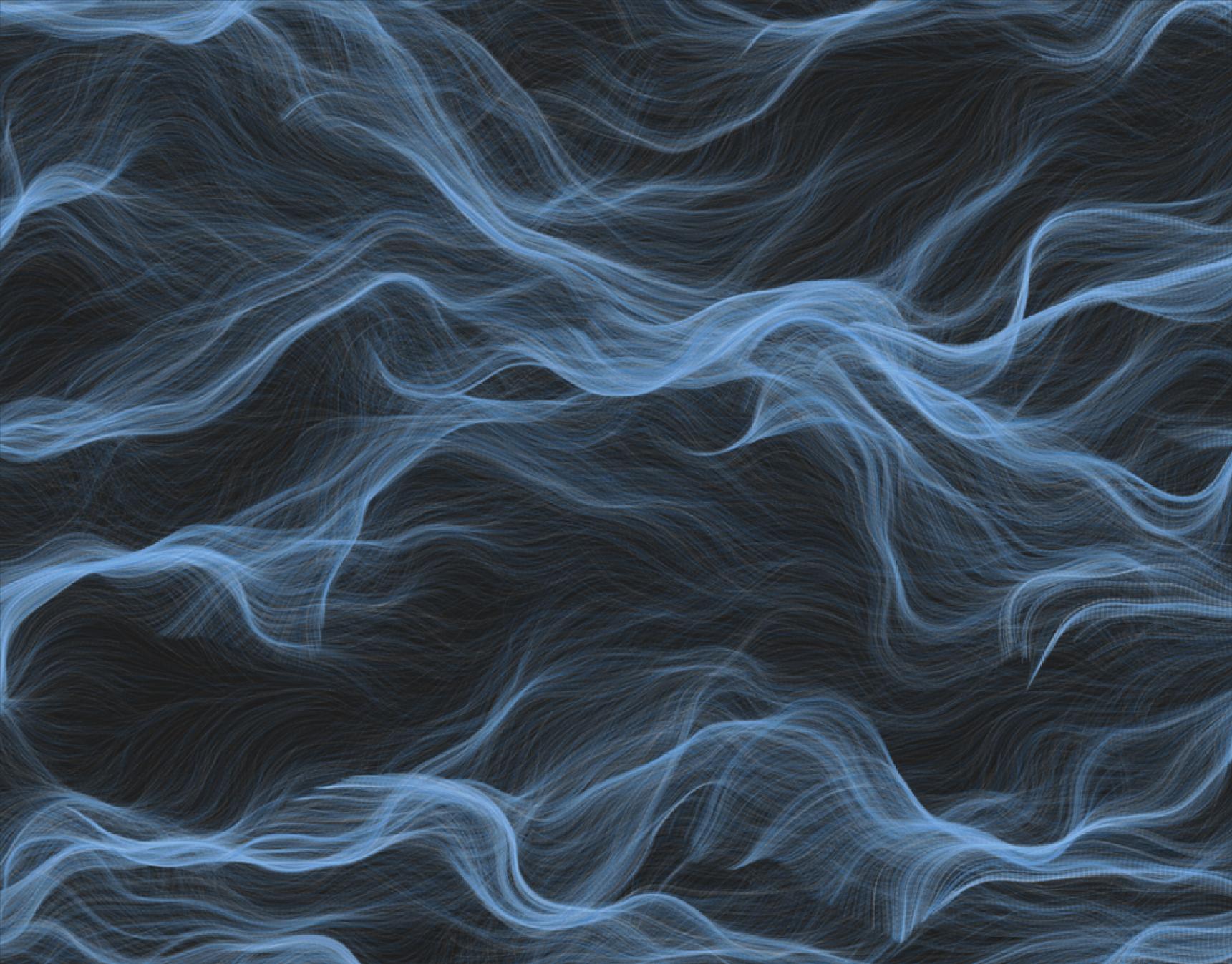
 using particle system

20221124 Bohyun Choi

Overview

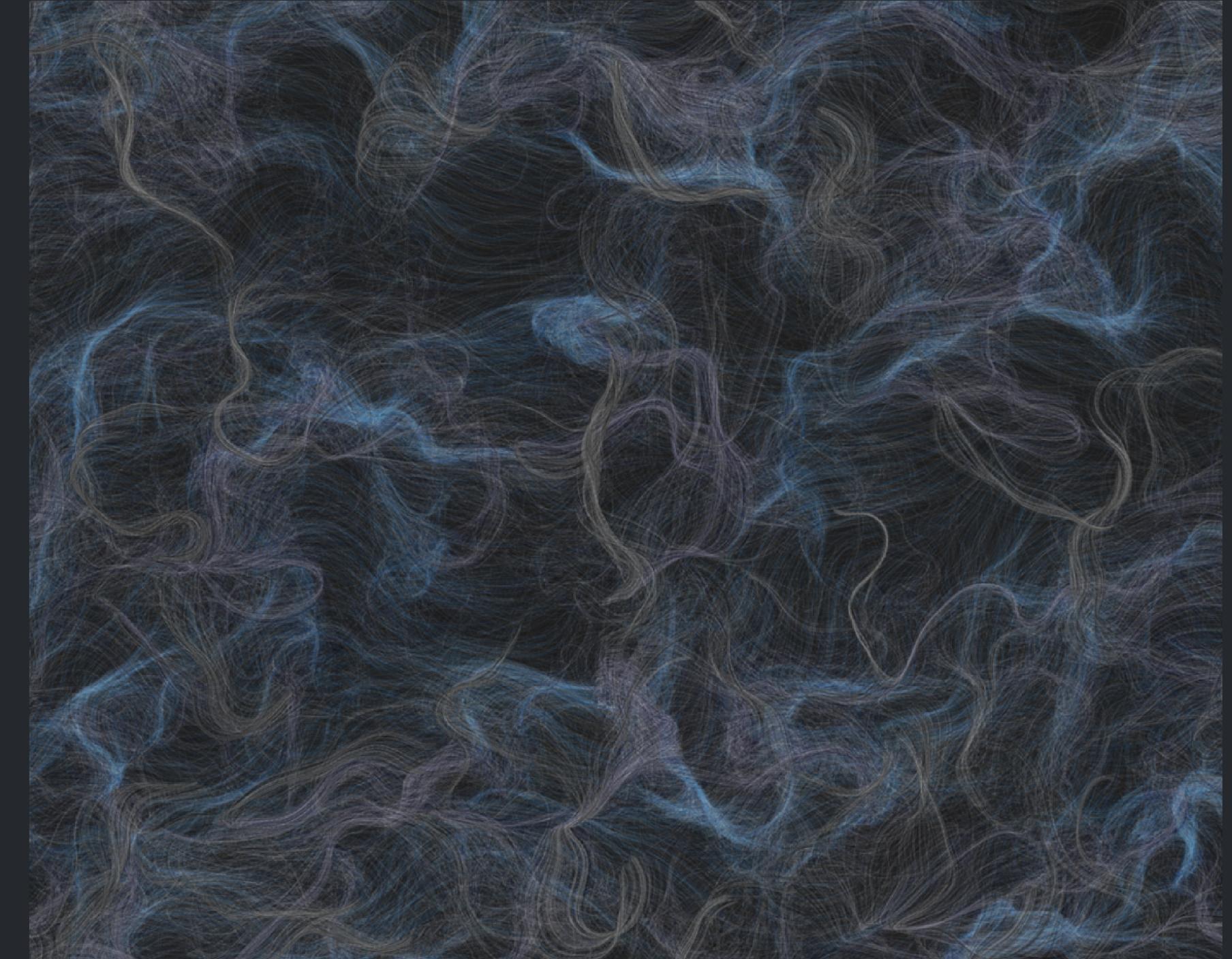
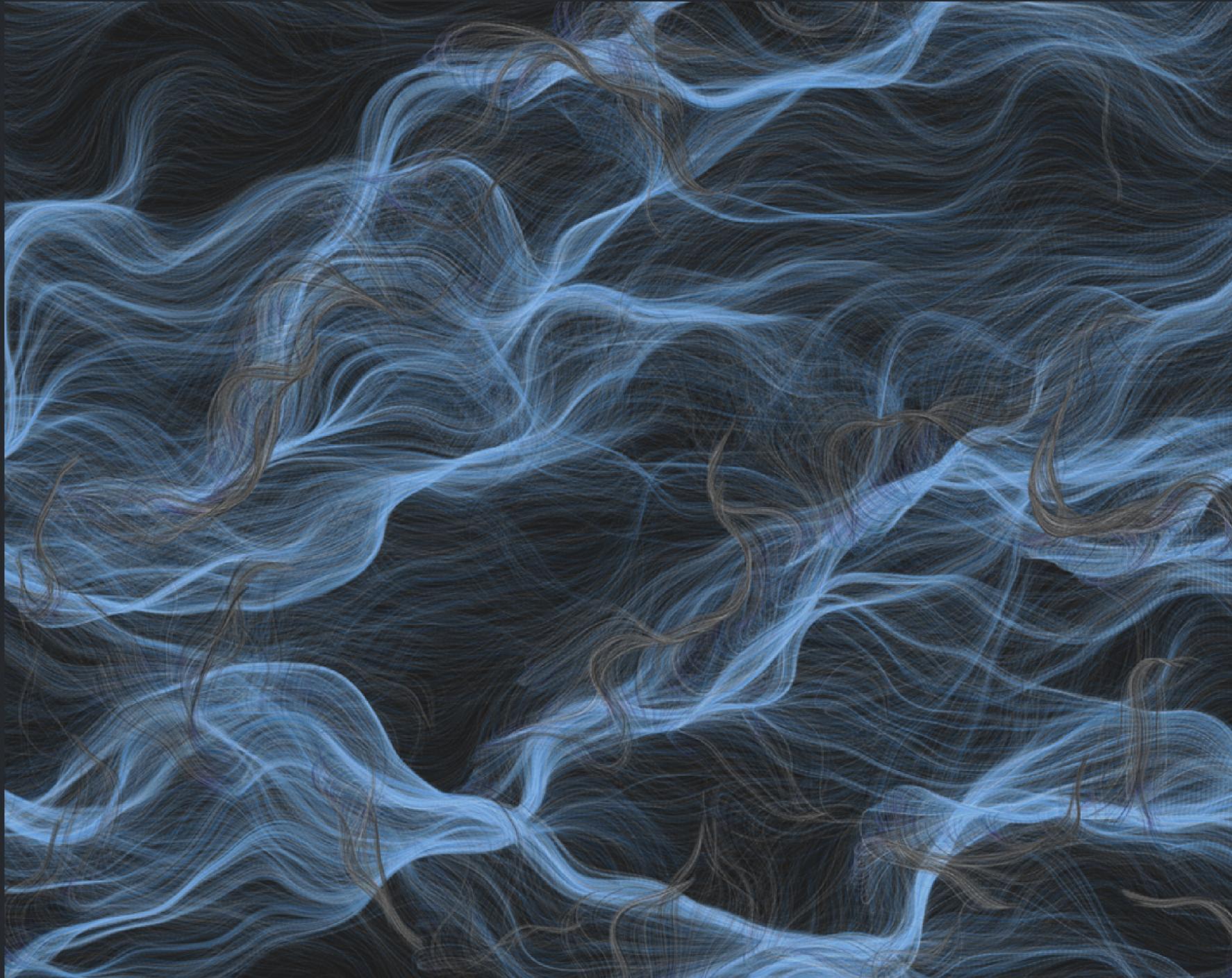
I wanted to make a wave as a particle and simulate it. The shape and color of the wave change according to the user interaction(by mouse clicking or pressing keyboard), and it was intended to express that the wave changes when you put your hand into the sea.

(If user do a lot of user interaction, it may look like smoke instead of waves...)



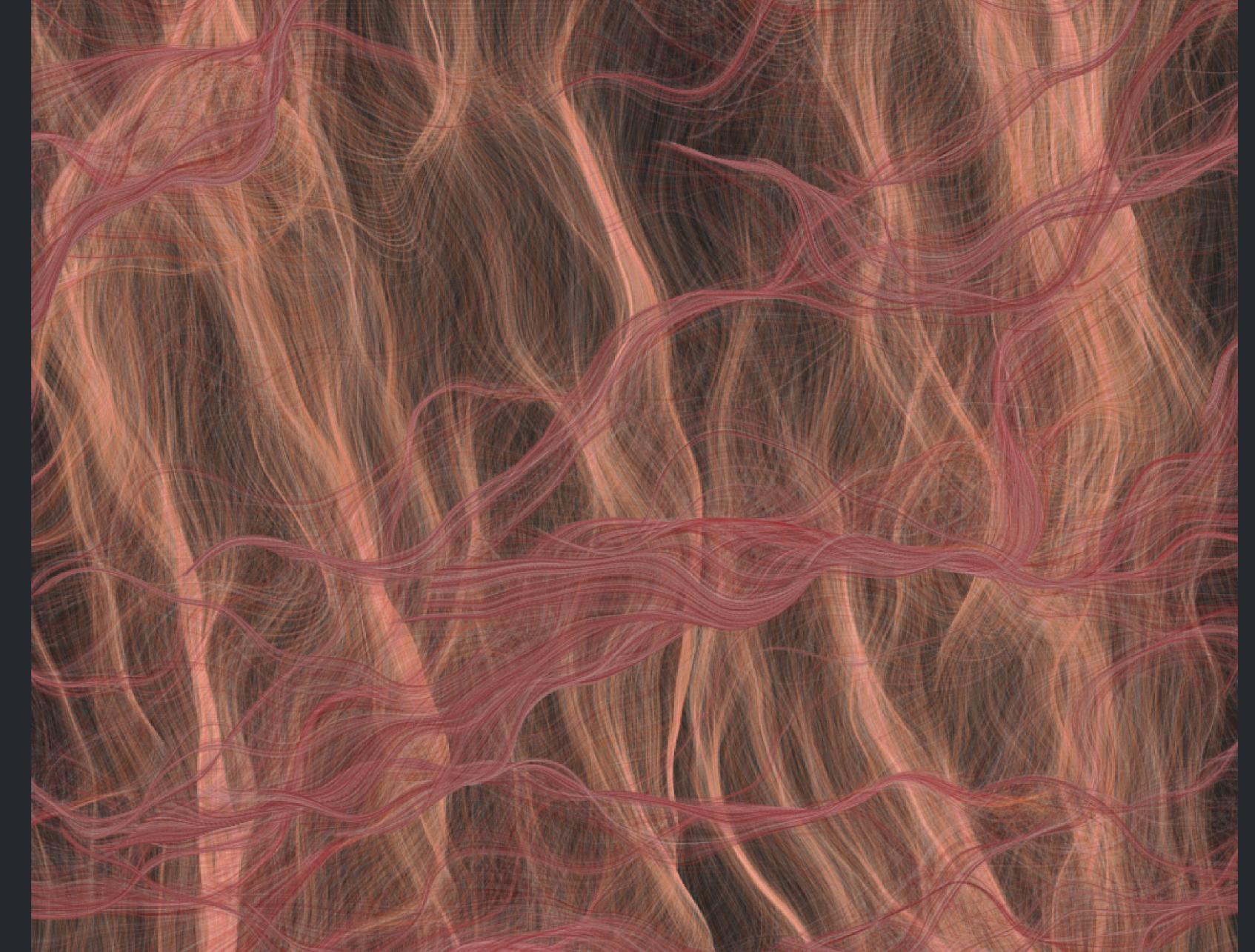
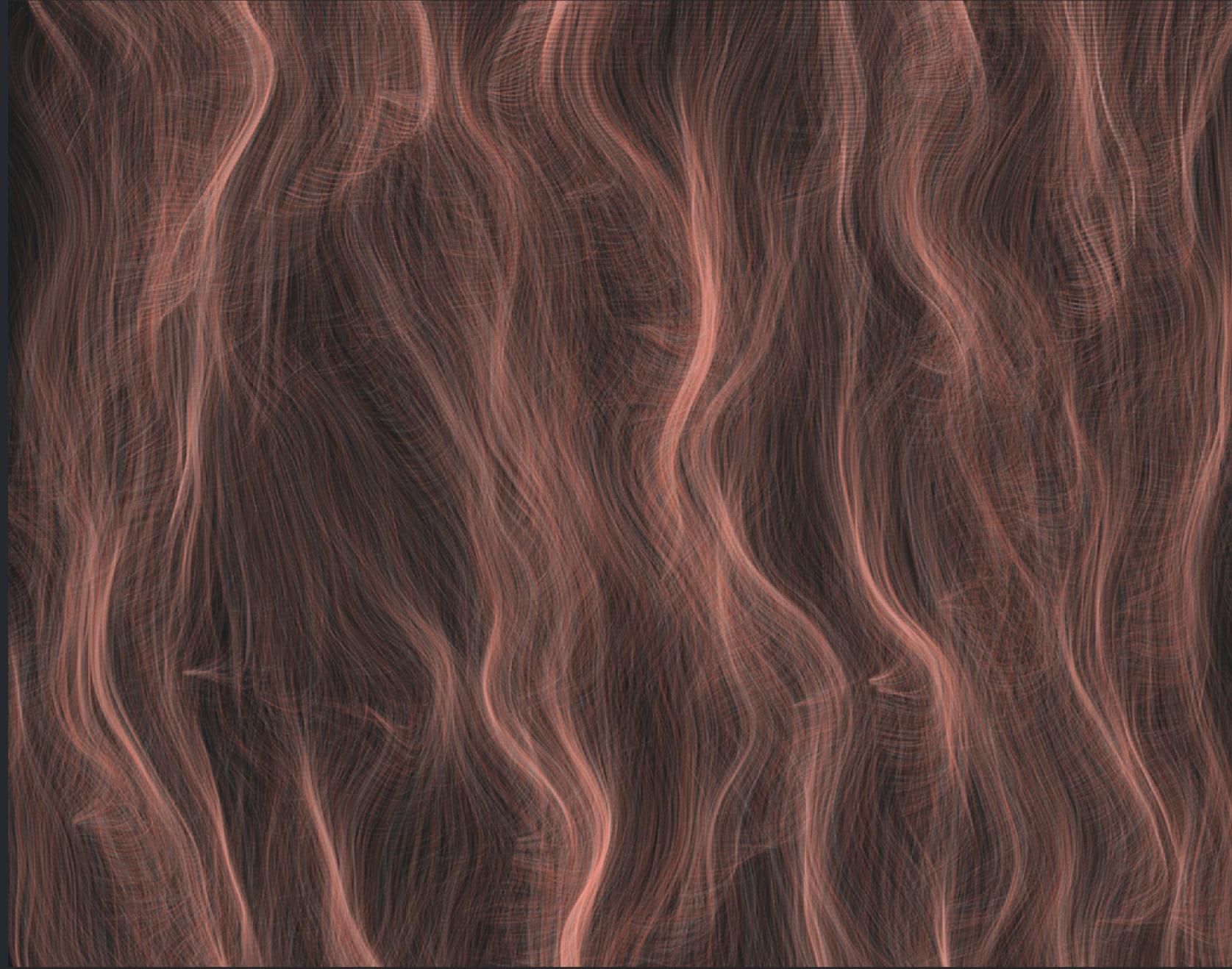
if user clicked mouse, particles will move to other way

```
var angle = noise(xoff, yoff, zoff) * TWO_PI * rand ;
```



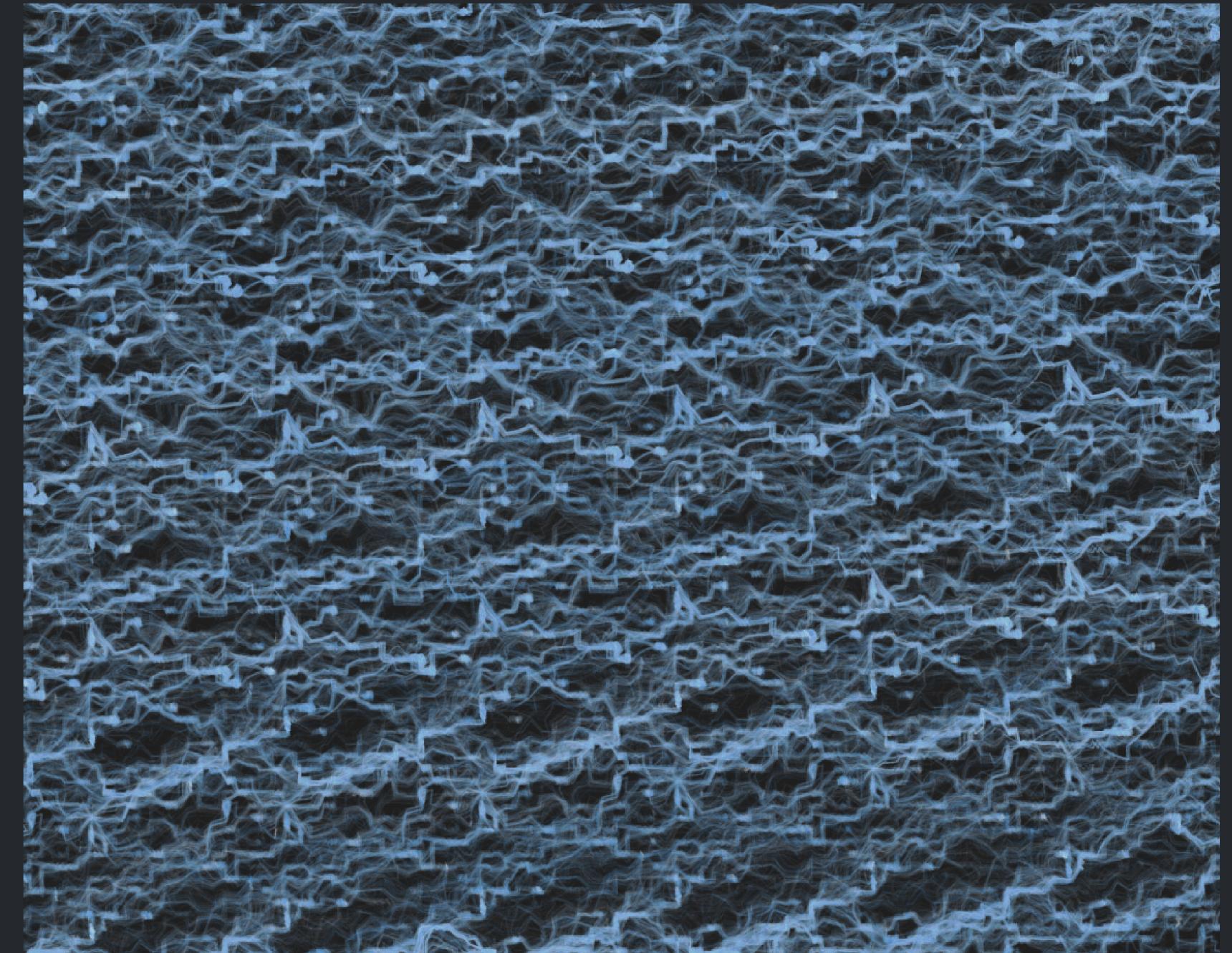
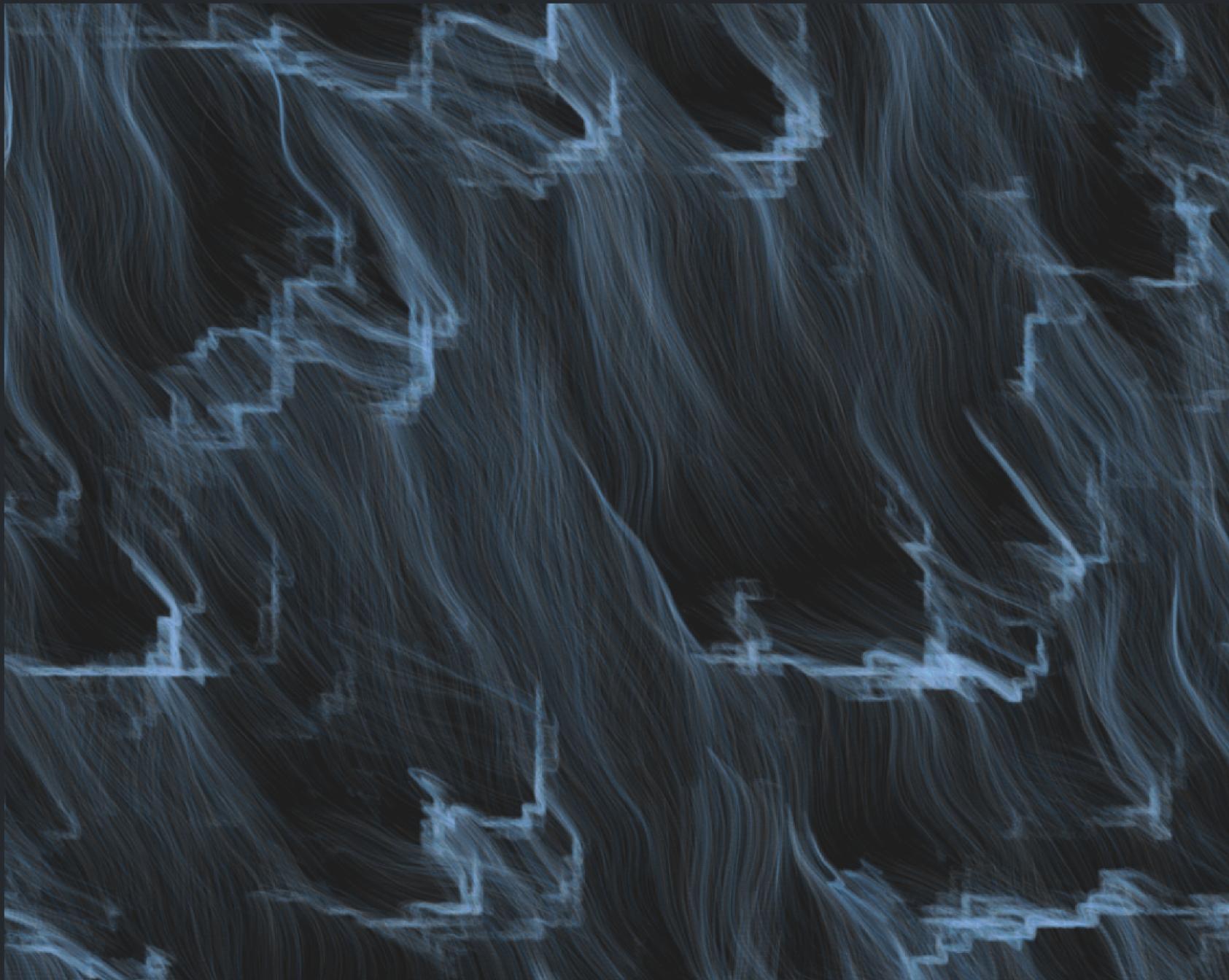
if user pressed spacebar, color of particle will be changed

```
show(r,g,b) { stroke(r,g,b,10); ... } }
```



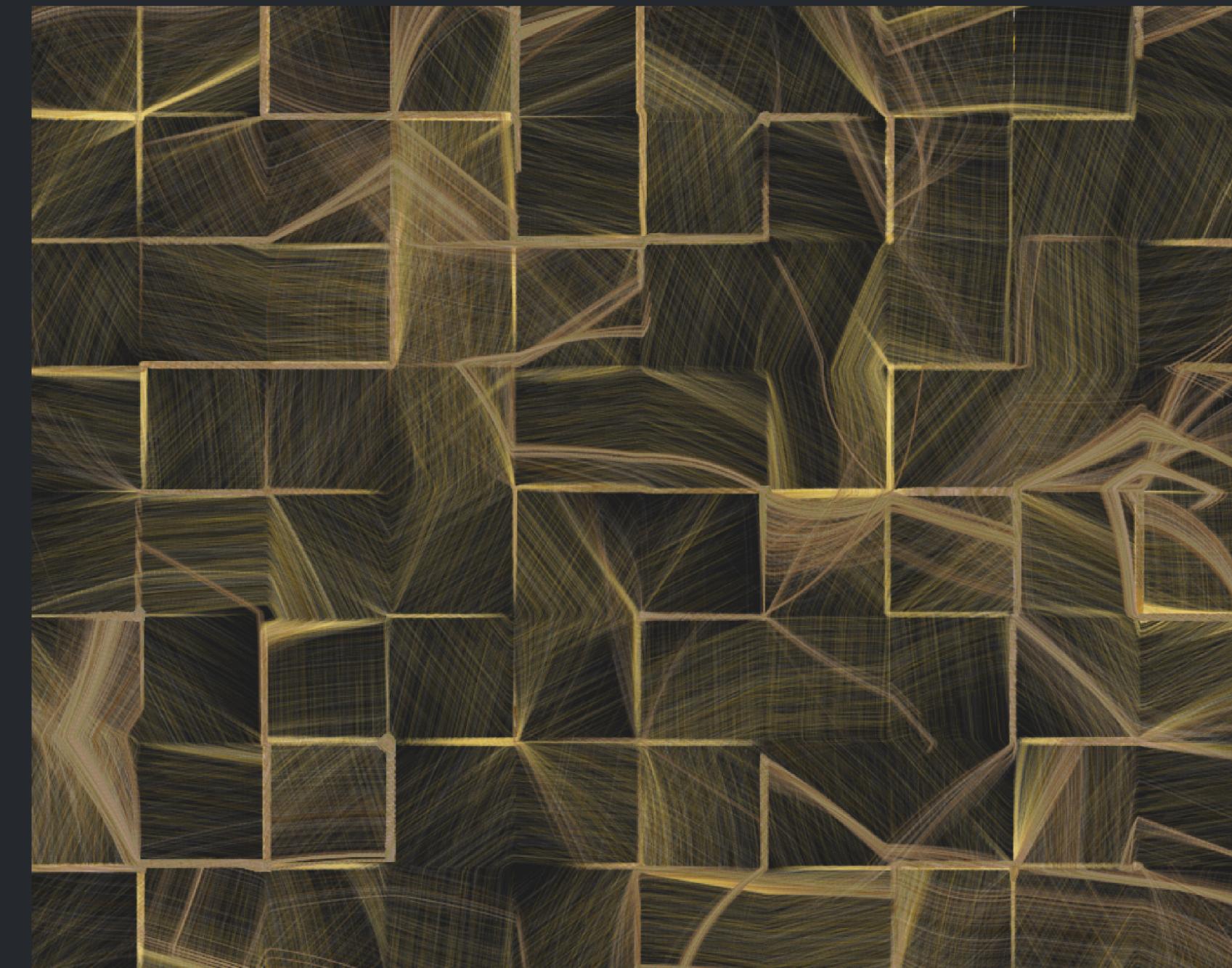
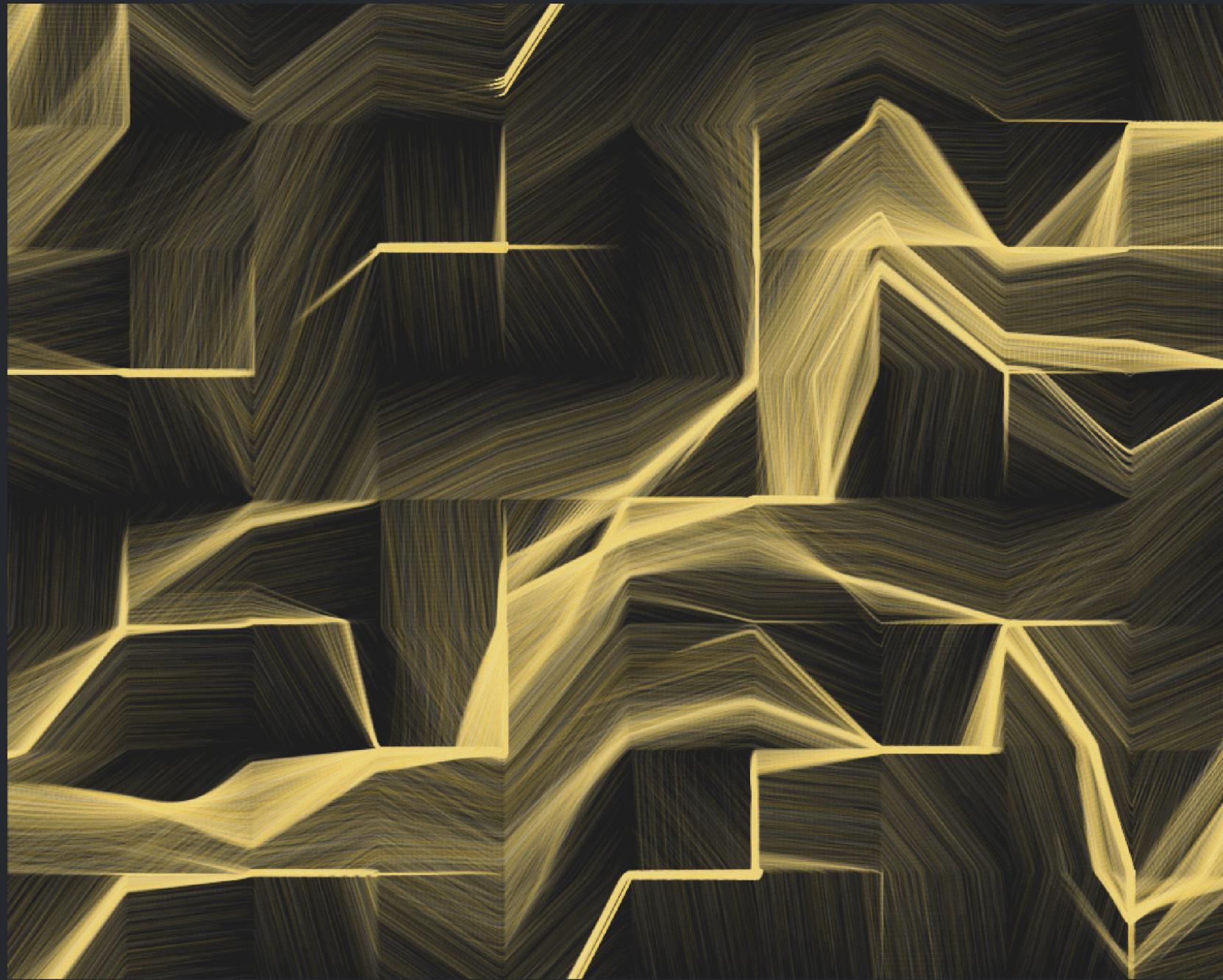
**if you change PI value to something
the particle's movement gonna be diffrent**

```
var angle = noise(xoff, yoff, zoff) * PI * rand ;
```



You can also change vector's value (magnitude, direction)

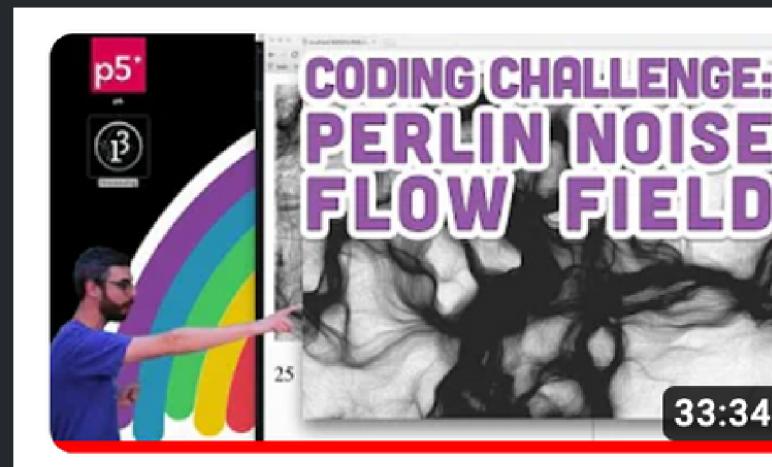
```
var v2 = p5.Vector.fromAngle(cols/2-x, rows/2-y, 0);
v2.add(v); v2.setMag(1);
```



And finally you can change increasement value and scale value too!

```
// change inc, scl to (0.1,10),(1,100) or else  
var inc = 0.1;  var scl = 10;
```

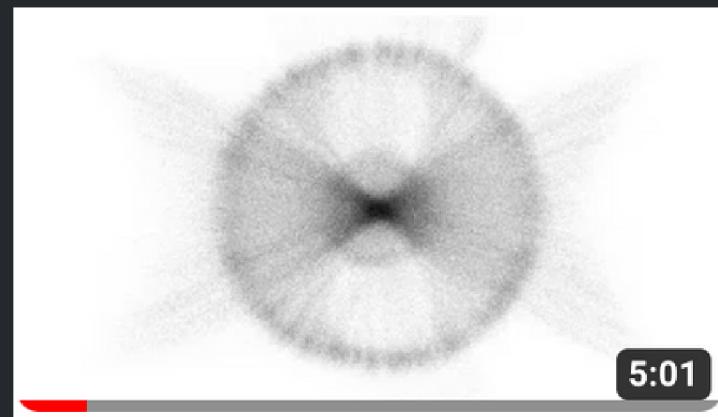
Reference



Coding Challenge #24: Perlin Noise Flow Field

The Coding Train · 조회수 34만회

In this coding challenge, I use Perlin noise to create a two-dimensional flow field with the p5.js library. Code:...



Particle System - in Flowfield | Generative Art #11

BioErrorLog · 조회수 1.6천회

Particle system by Processing. Making blog:
<https://www.bioerrorlog.work/entry/generative-art-processing-11...>

I've referenced a lot of codes in Daniel Shiffman's code.

<https://editor.p5js.org/bohyuneee/sketches/a4Pq9e409>