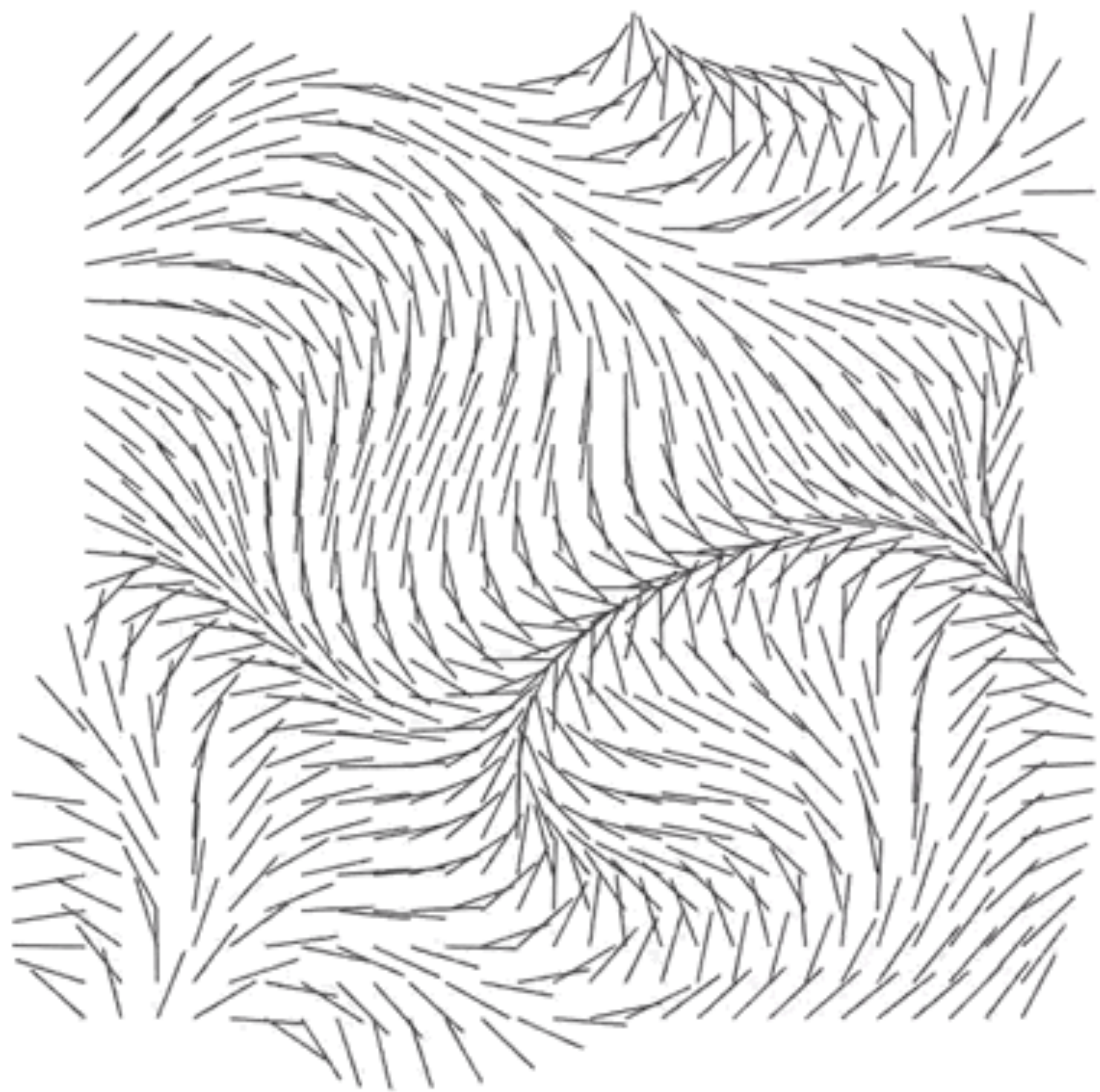


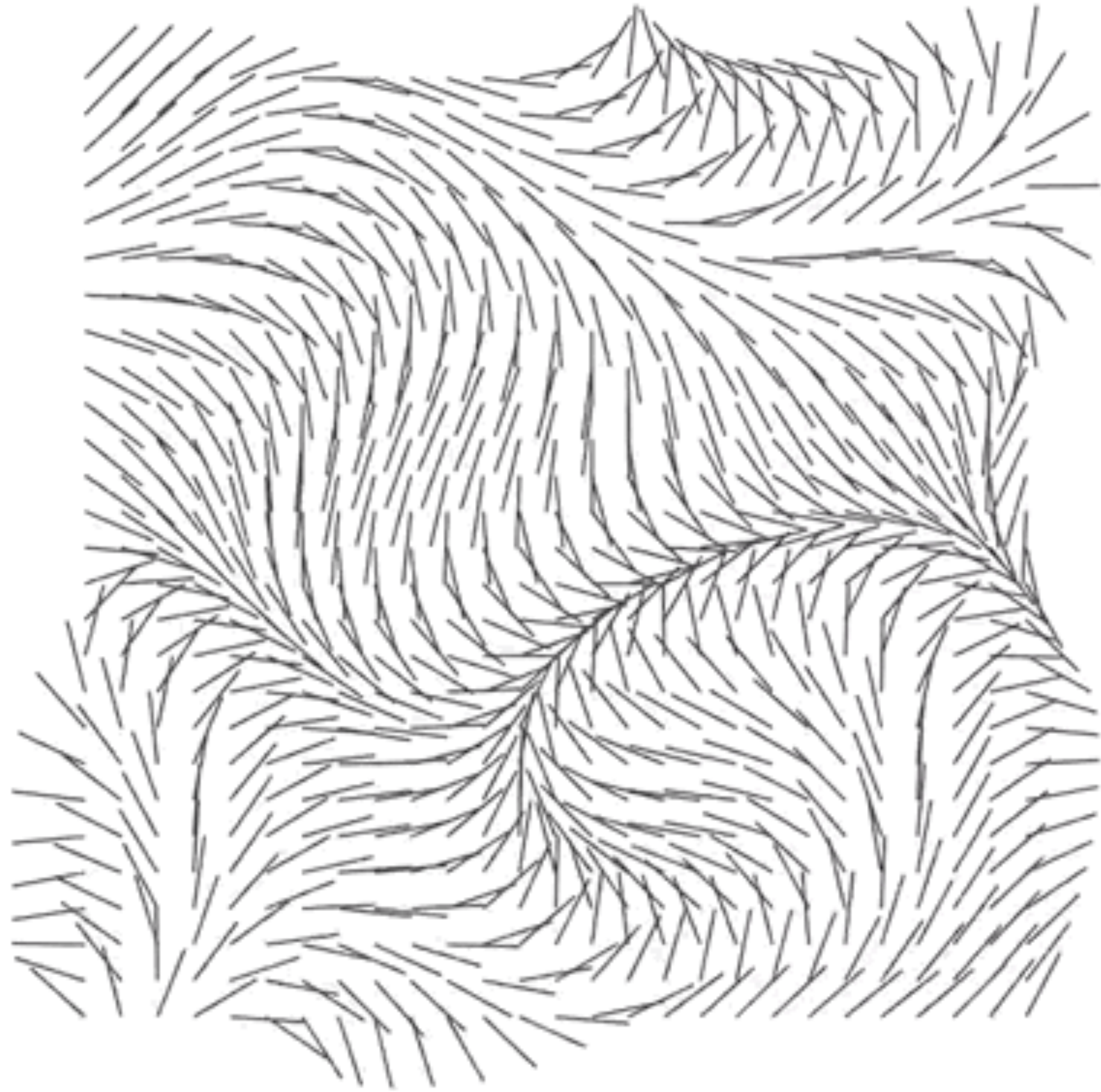

```
val radians = glm.simplex(  
    Vec4(  
        x = u,  
        y = v,  
        z = 5f * cos(TWO_PI * time / 20f),  
        w = 5f * sin(TWO_PI * time / 20f)  
    )  
    ) * TWO_PI
```

```
val endX = startX + (r * sin(radians))  
val endY = startY + (r * cos(radians))  
drawLine(  
    start = Offset(startX, startY),  
    end = Offset(endX, endY),  
    ...  
)
```

Annate/Friends!



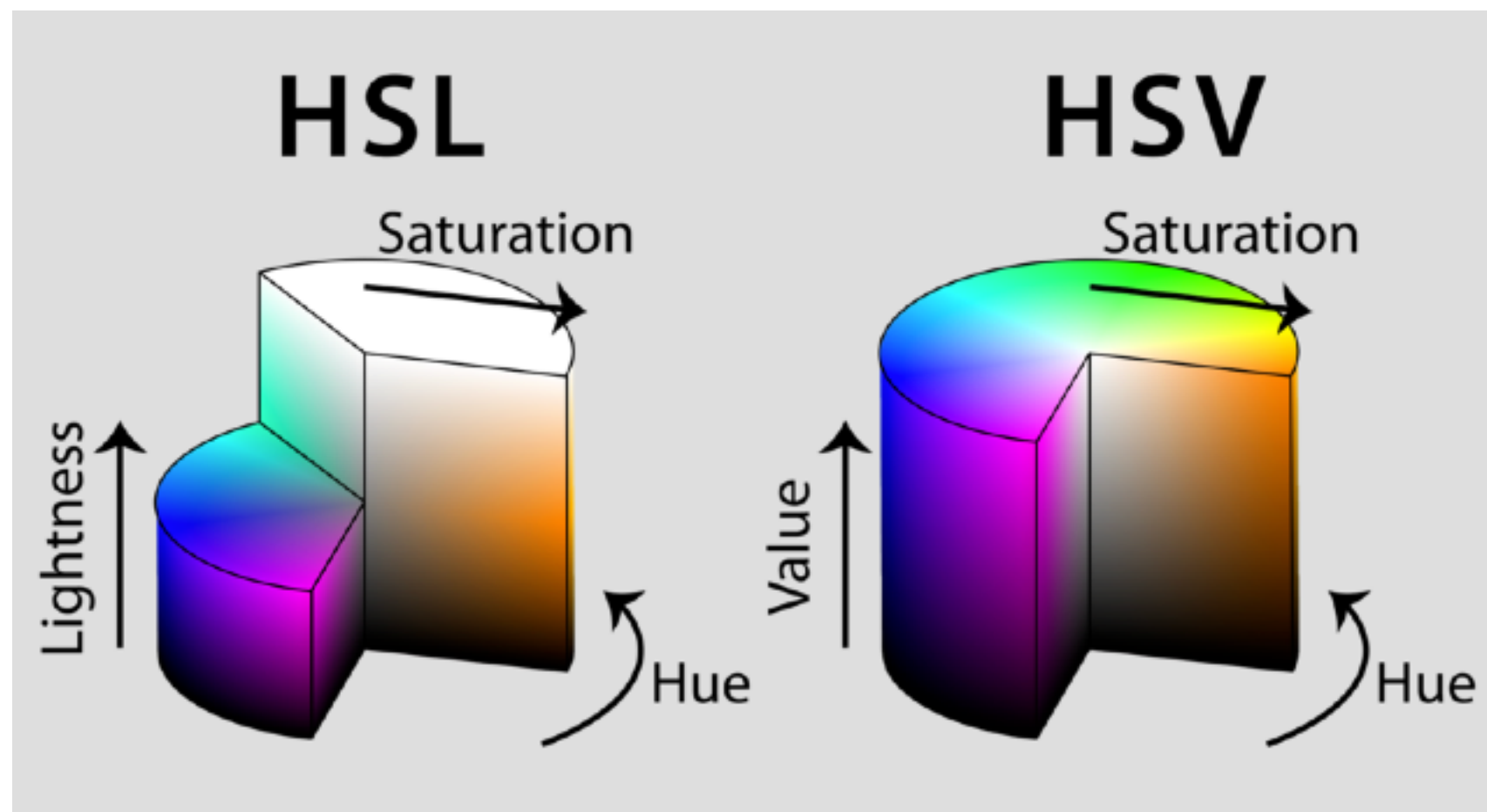
Animated Flow Fields!



```
val radians = glm.simplex(
    Vec4(
        x = u,
        y = v,
        z = 5f * cos(TWO_PI * time / 20f),
        w = 5f * sin(TWO_PI * time / 20f)
    )
) * TWO_PI

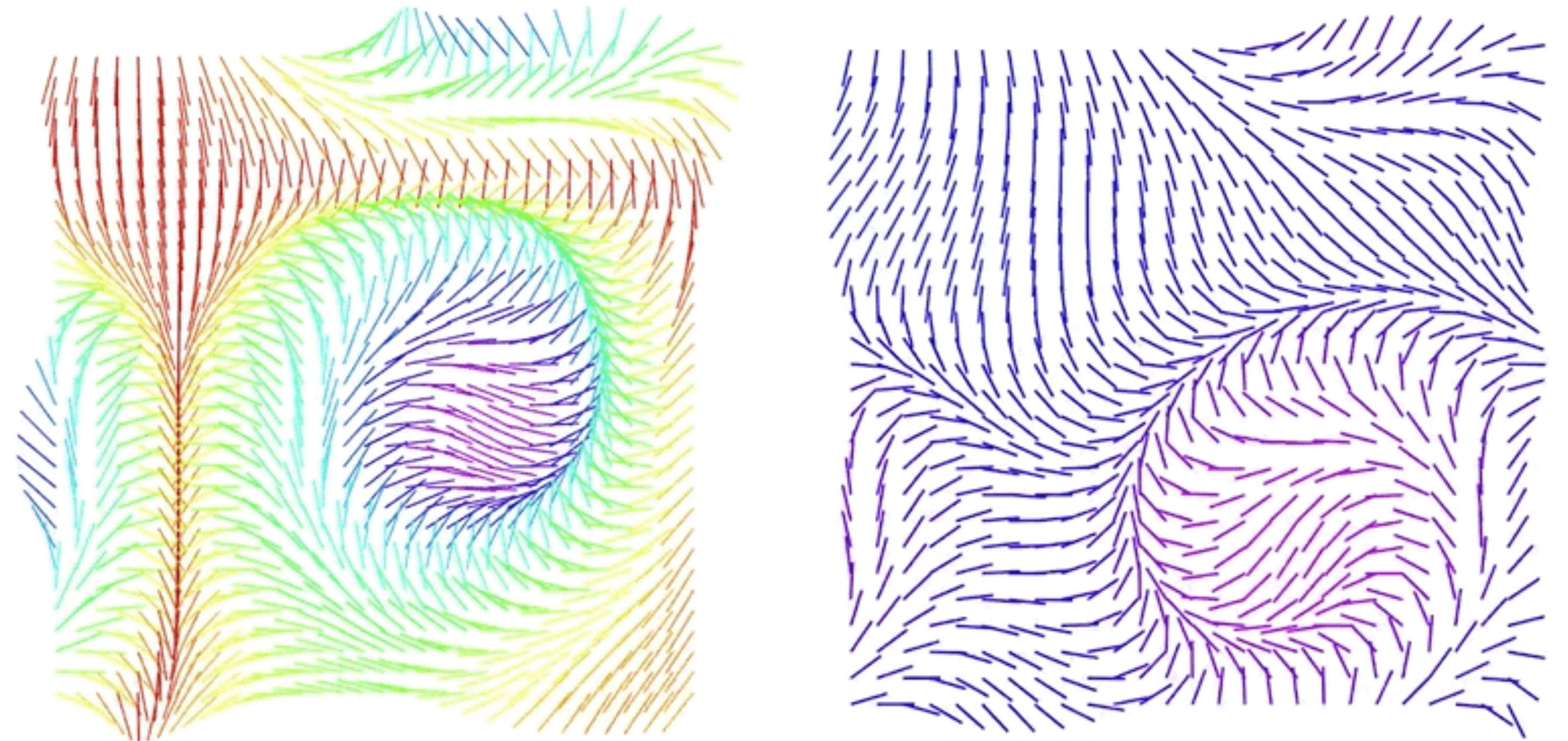
val endX = startX + (r * sin(radians))
val endY = startY + (r * cos(radians))
drawLine(
    start = Offset(startX, startY),
    end = Offset(endX, endY),
    ...
)
```


Color



wikipedia.org

- HSL, HSV use hue
- hue is in $[0, 360]$ -> like angles?
- map noise to hue ranges 🌈



```
// Compute hue based on noise
val hue = (noise * 360f).absoluteValue
// OR
val hue = map(noise, -1f, 1f, 170f, 300f)

// Use hue in hsv
val color = Color.hsv(hue, saturation=1f, value=1f)
drawLine(color = color, ...)
```