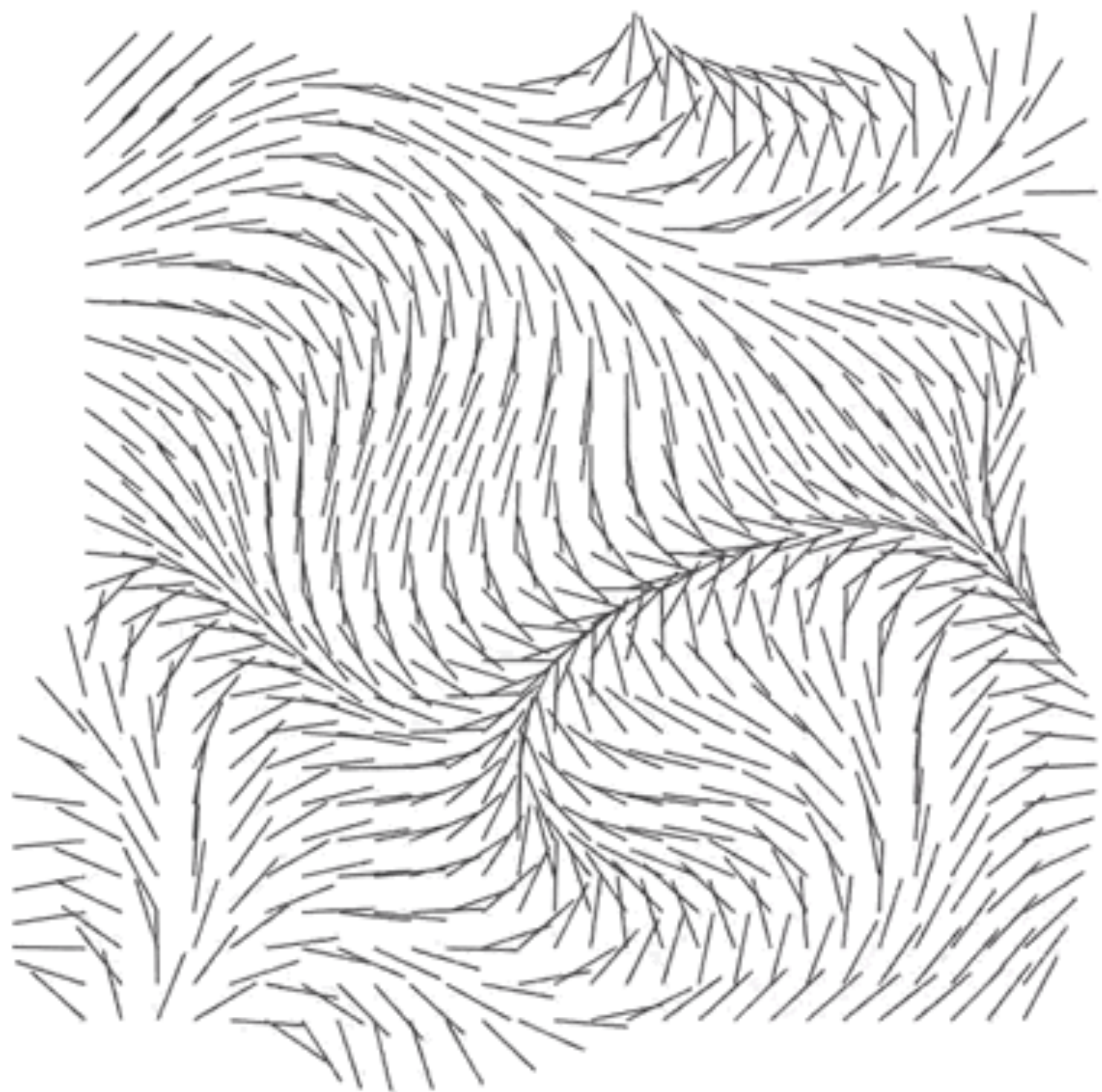




```
val radians = glm.simplex(
    Vec4(
        x = u,
        y = v,
        z = 5f * cos(TWO_PI * time / 20f),
        w = 5f * sin(TWO_PI * time / 20f)
    )
) * TWO_PI
```

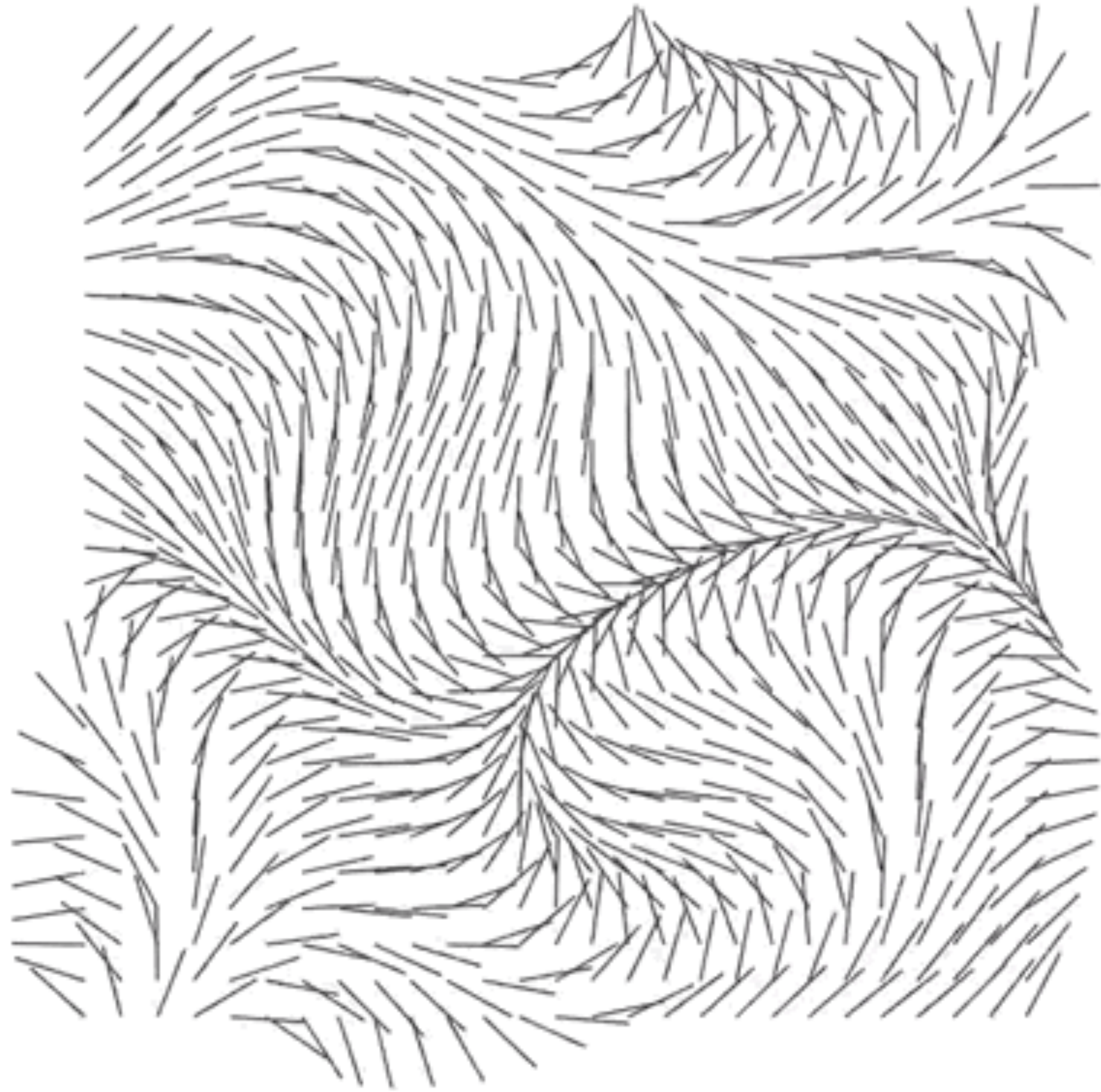
```
val endX = startX + (r * sin(radians))
val endY = startY + (r * cos(radians))
drawLine(
    start = Offset(startX, startY),
    end = Offset(endX, endY),
    ...
)
```

*Ante* Friends!





# *Animated* Flow Fields!

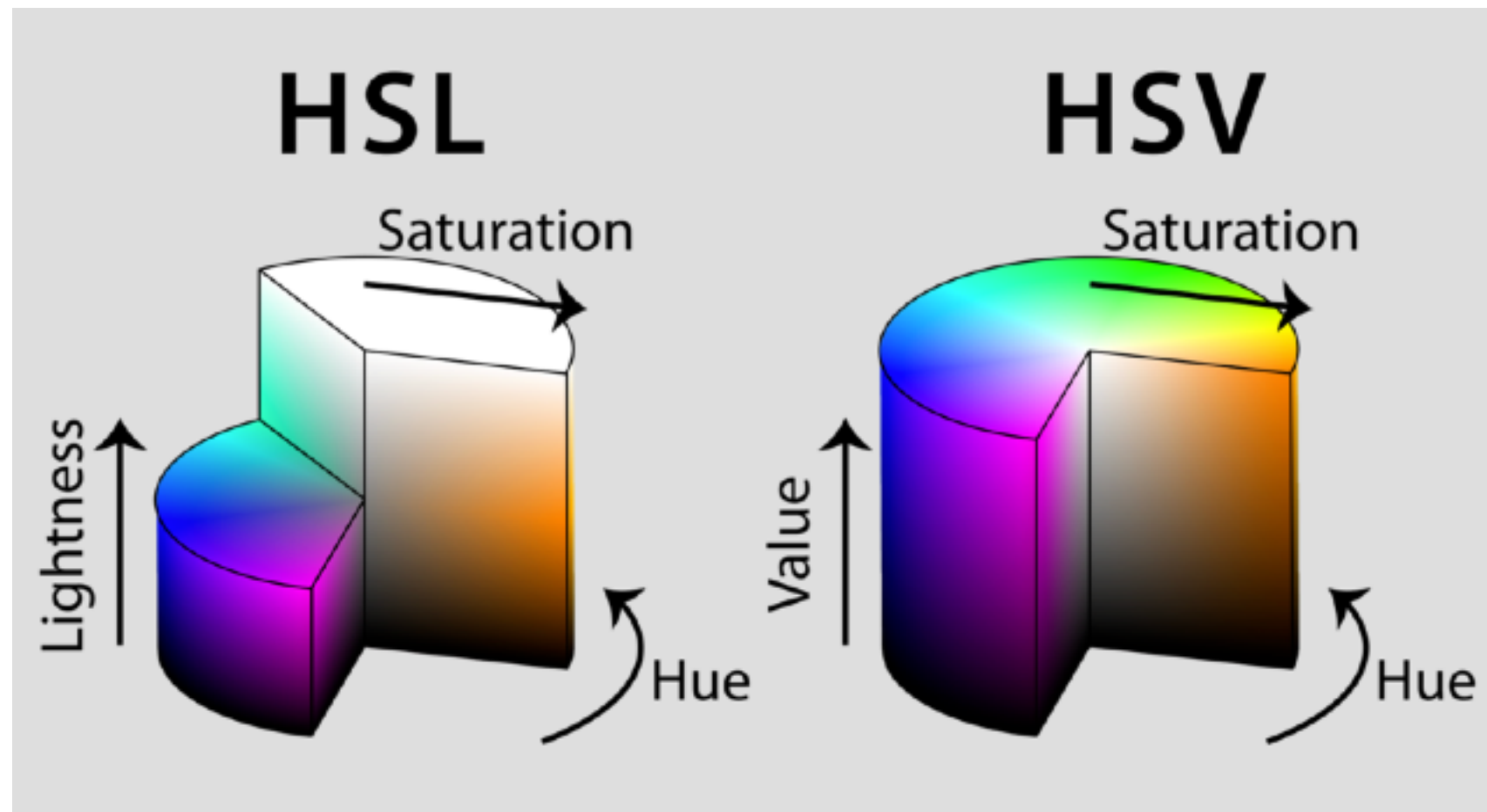


```
val radians = glm.simplex(
    Vec4(
        x = u,
        y = v,
        z = 5f * cos(TWO_PI * time / 20f),
        w = 5f * sin(TWO_PI * time / 20f)
    )
) * TWO_PI

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

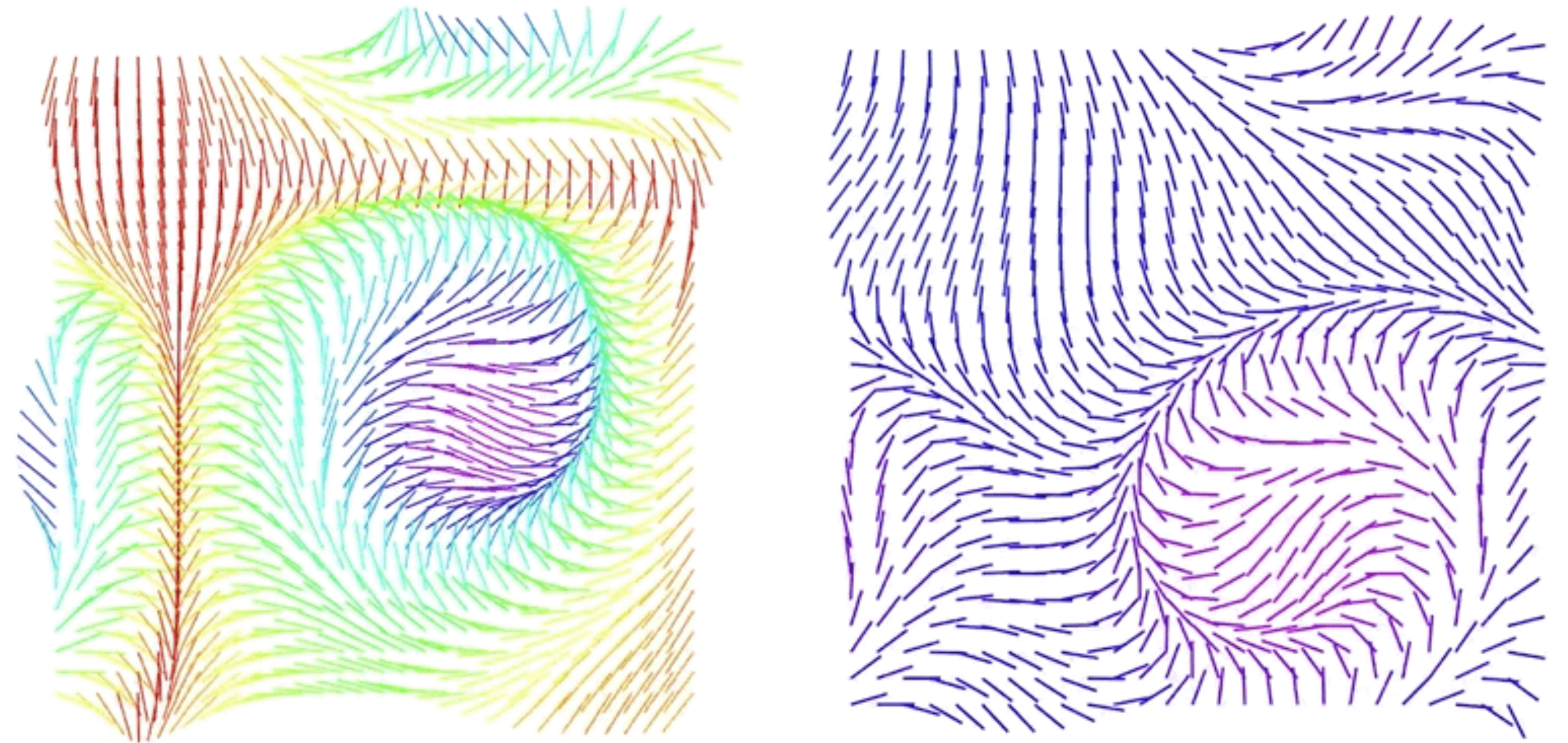


# Color



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, ...)
```