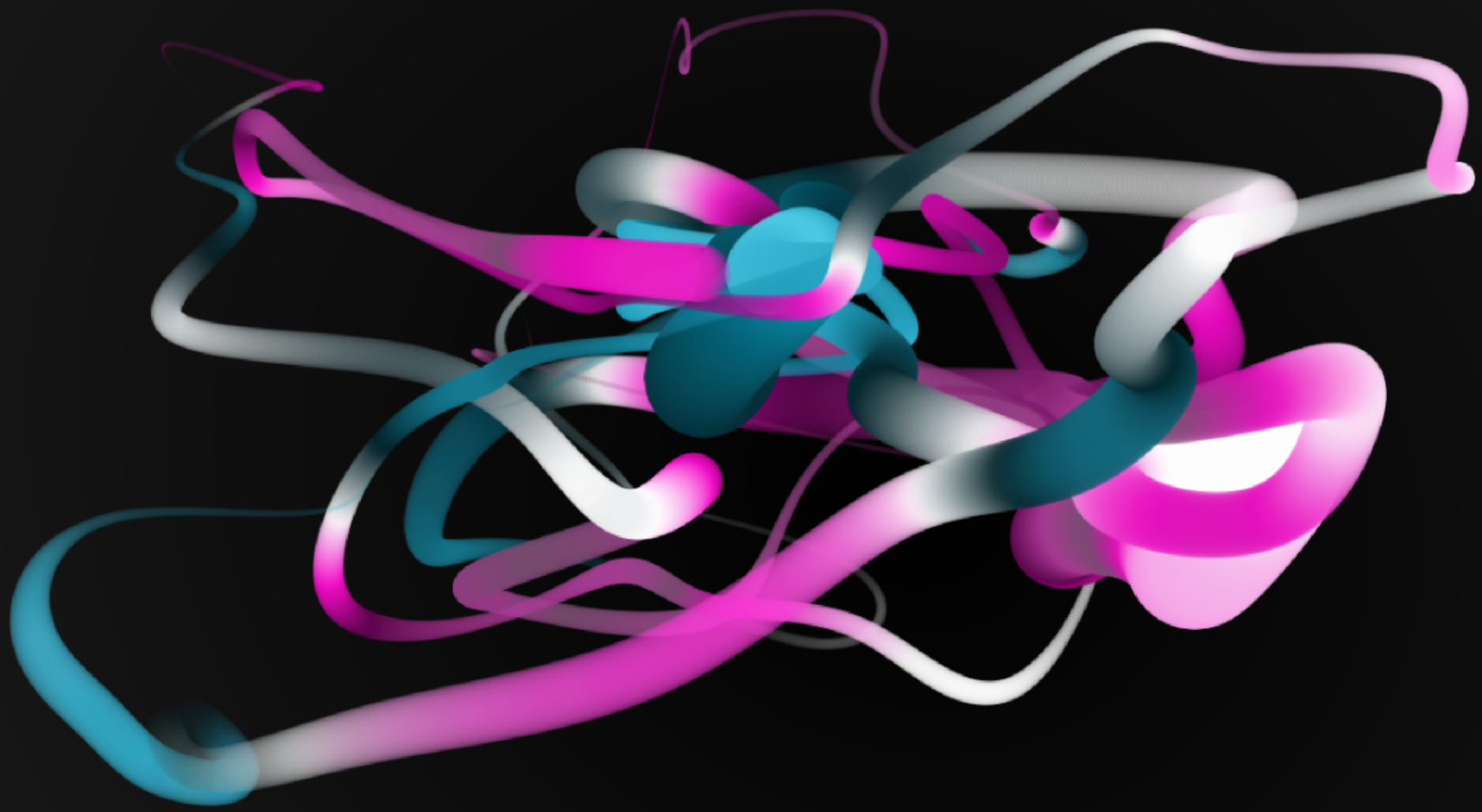
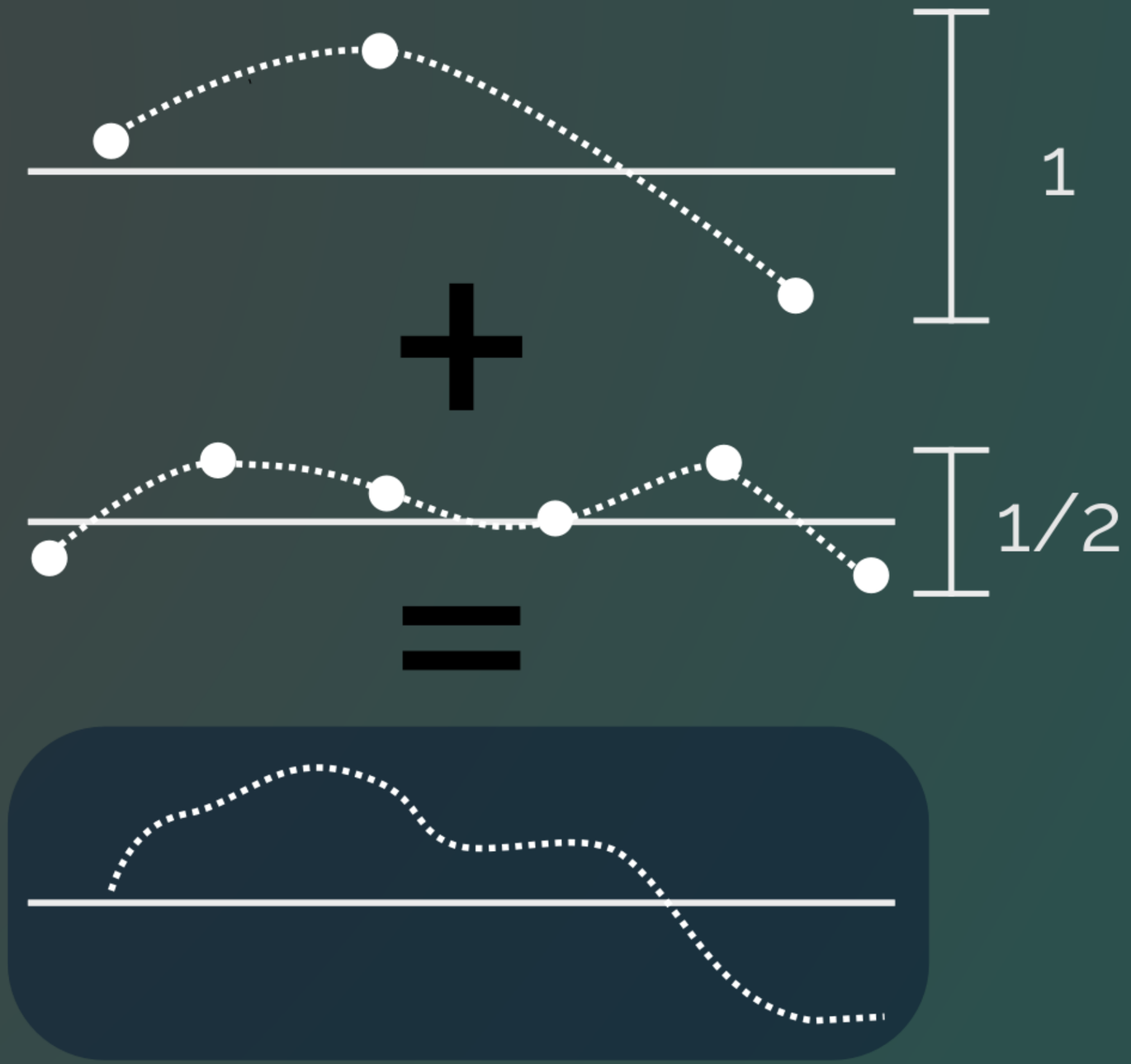
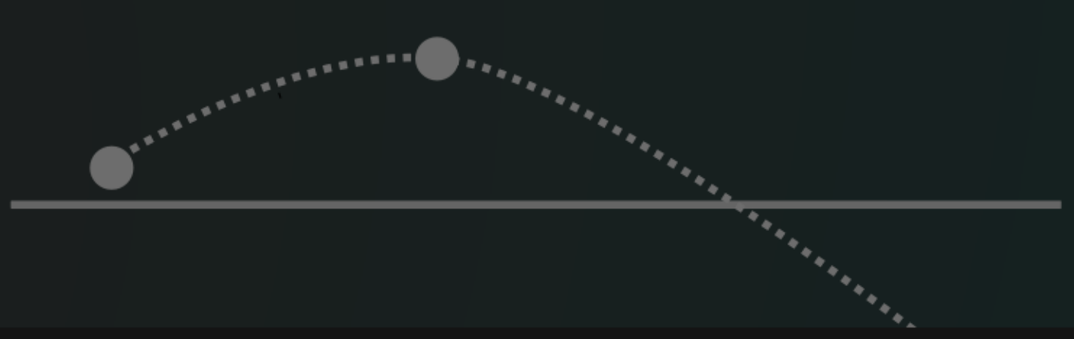
Generative art in **Clojure**



Perlin Noise

- Random point
- Cubic spline





Perl

- Ra
- Cu

```clojure
(defn get-perlin-func [freq levels]
  "Return a function, valid over domain [0,1] which produces Perlin noise."
  (let [c (expt-list 2 levels)
        frequencies (map (partial * freq) c)
        amplitudes  (map reciprocal c)]
   (->> [frequencies amplitudes]
        (apply map rands-with-amplitude)
        (map #(interpolate-parametric % :cubic))
        (apply sum-funcs))))
```

Perlin Noise

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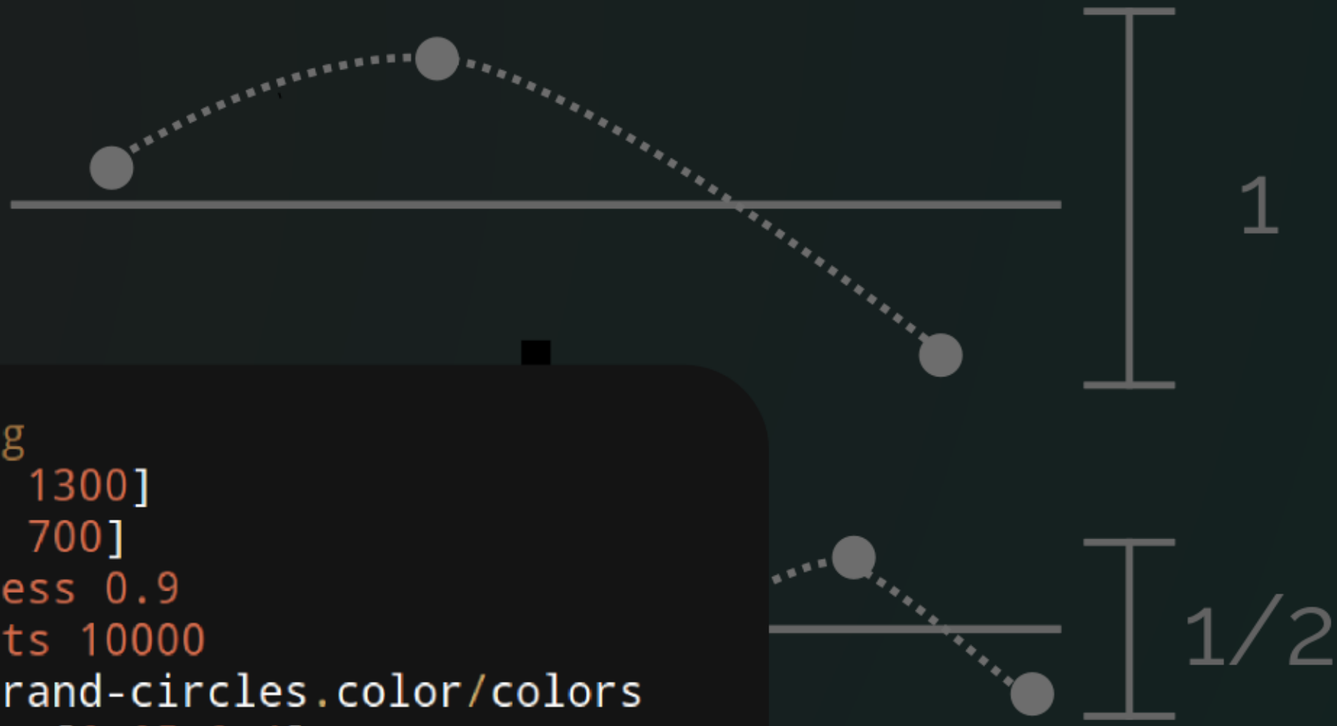


```clojure
(def config
  {:x [300 1300]
   :y [200 700]
   :roughness 0.9
   :n-points 10000
   :color rand-circles.color/colors
   :opacity [0.05 0.4]
   :radius [0 30]})
```