

METHODS OF ITERATING

Emergence

Max Cooper

Emergence is the story of natural laws and processes, their inherent beauty, and their action to show the universe, us and the world we live in.

The story is told using a universe timeline, from pre-big bang to future, with each chapter a collaboration with a different visual artist, including some collaborations with mathematicians or scientists for those chapters using real data visualisation.





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[maxcooper.net /](http://maxcooper.net/)

METHODS OF ITERATING

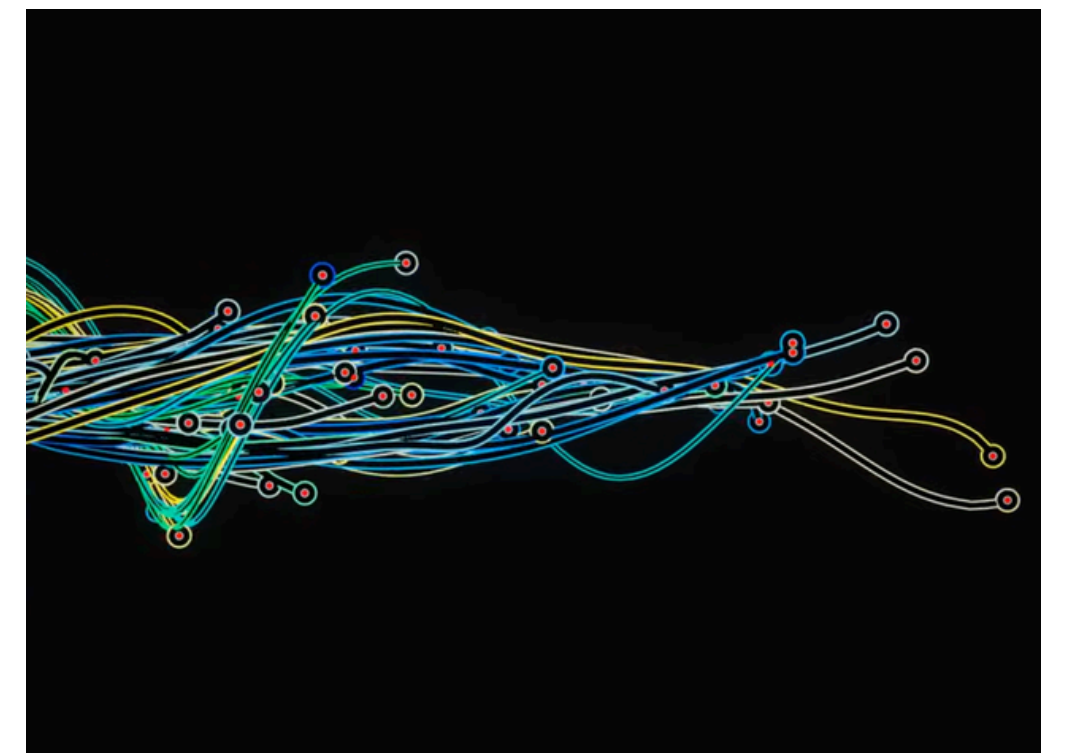
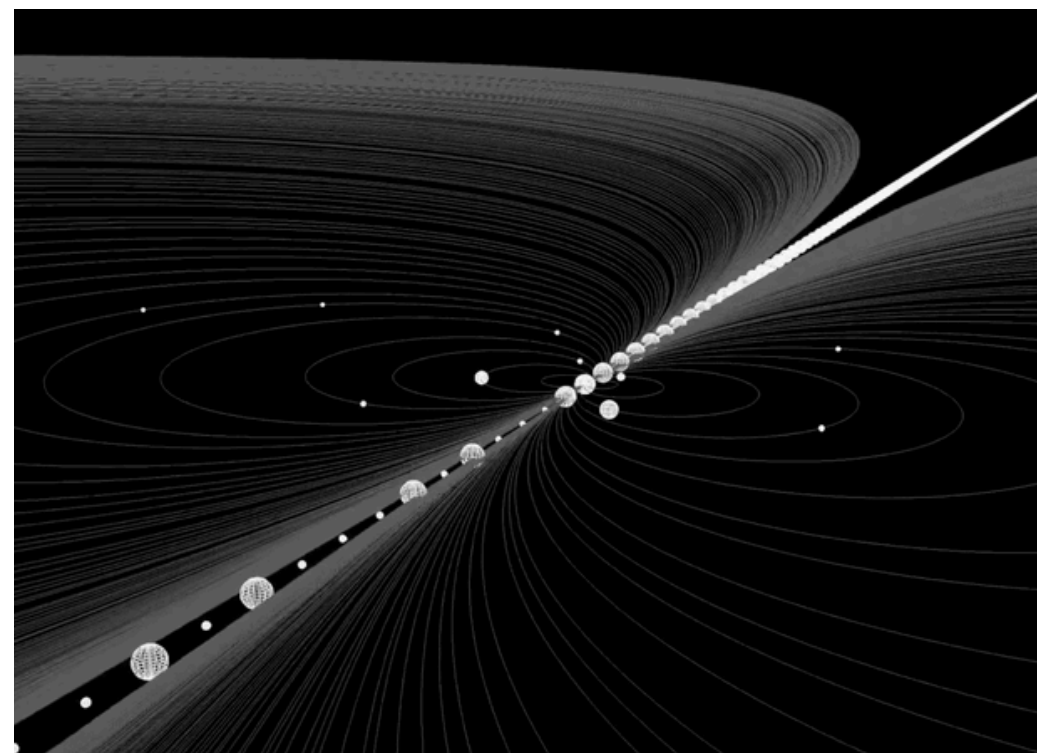
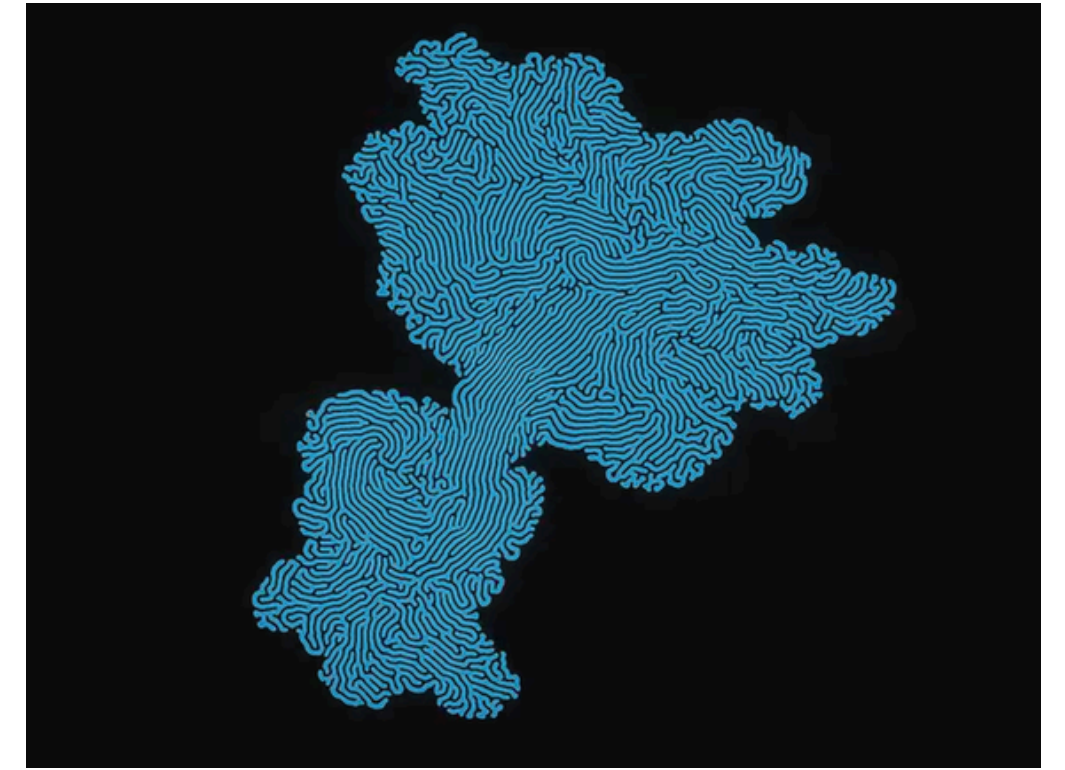
I like it because it clearly demonstrates how complex visual structures can be generated from simple rules.

In this film, the particles(natural elements) themselves are iterating.

Visual Animation

How visual forms can develop from simple rules

DINGYI TANG / ALEX

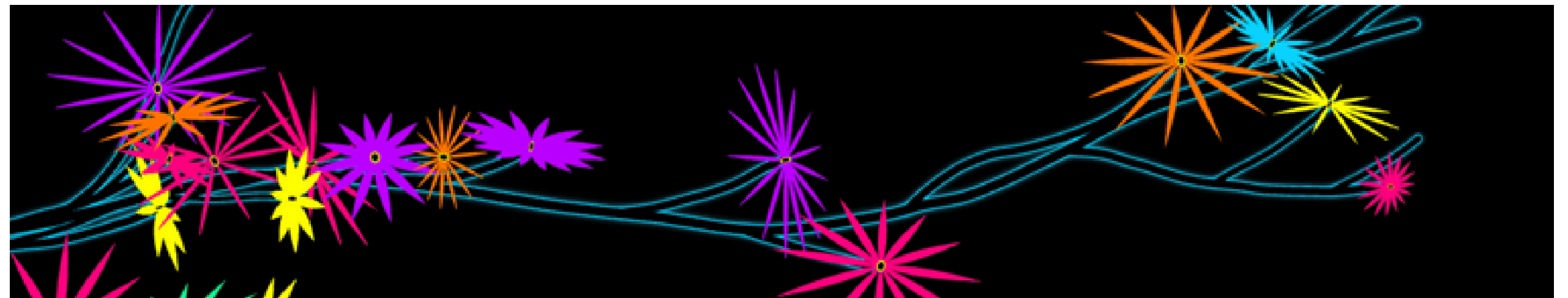
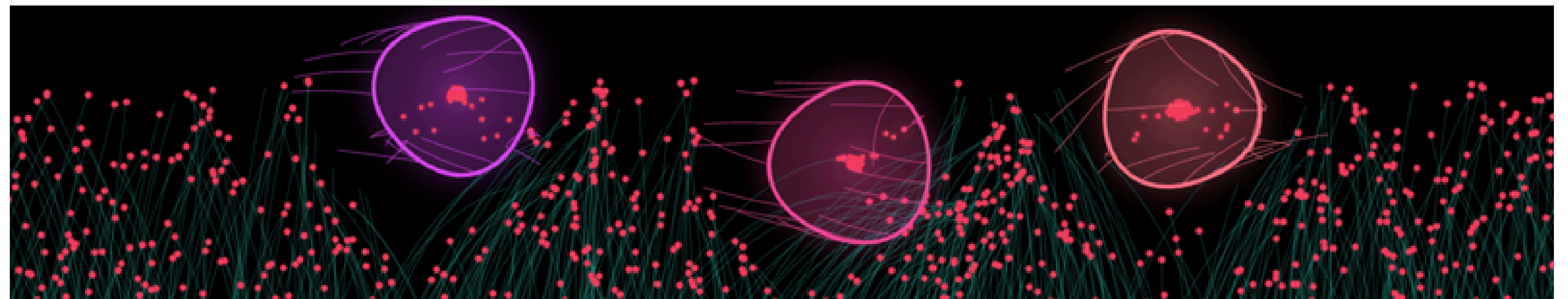
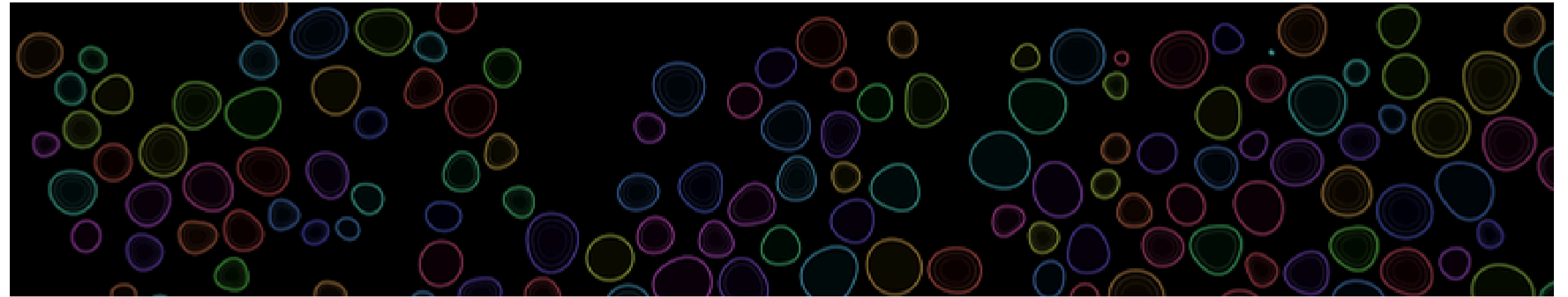


LIFE - ADAPTATION

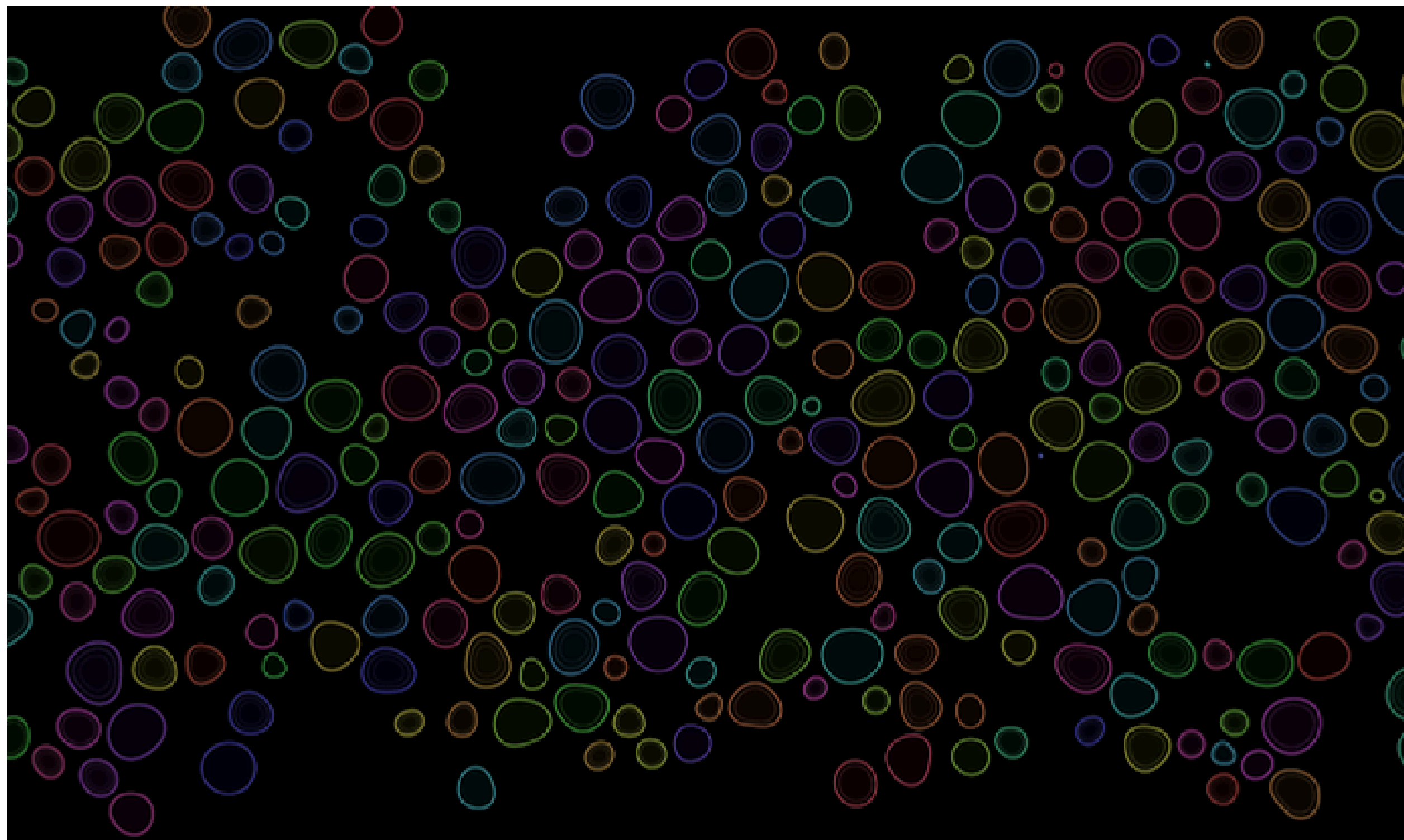
This is a series of beautiful colourful exploration of simple living forms in an ancient marine environment.

I choose three living forms to copy, simple cells, plant forms and simple bacterias competing for resources.

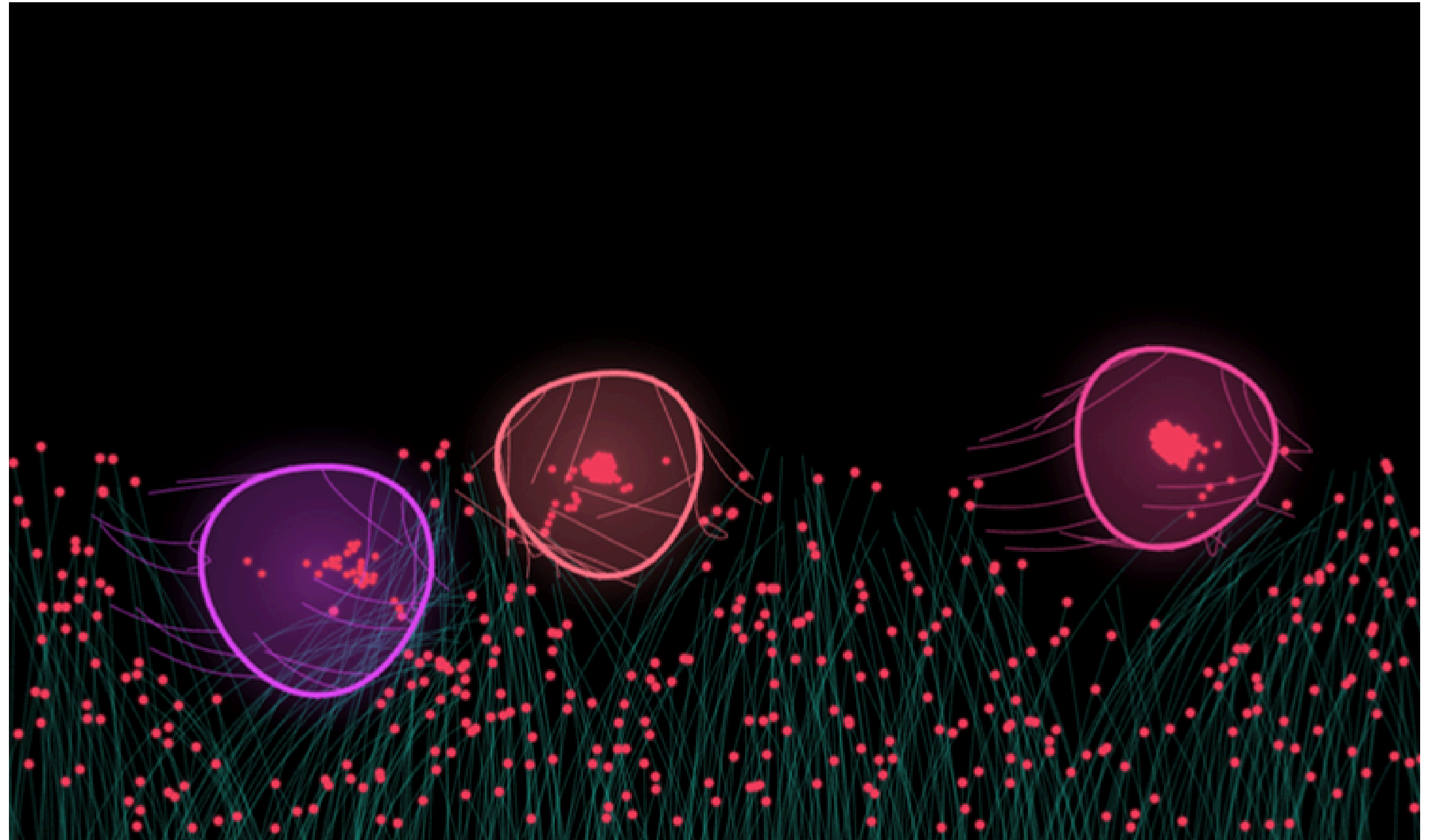
These are just the systems that have led to the rich diversity and differentiation of life we observe today, with nearly perfect adaptations in almost every ecological niche.



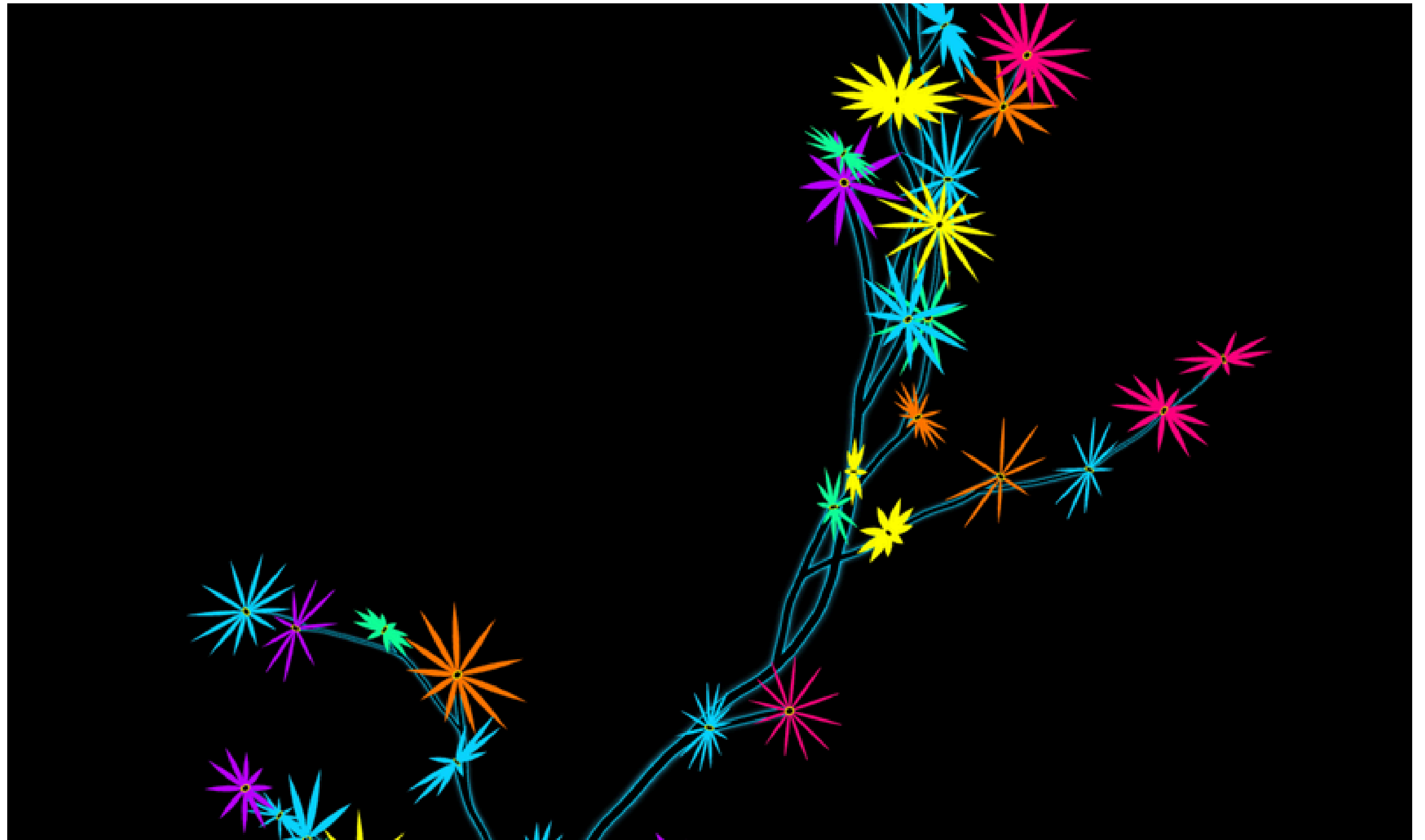
EMERGENCE OF LIFE



BATTLE OF CELLS



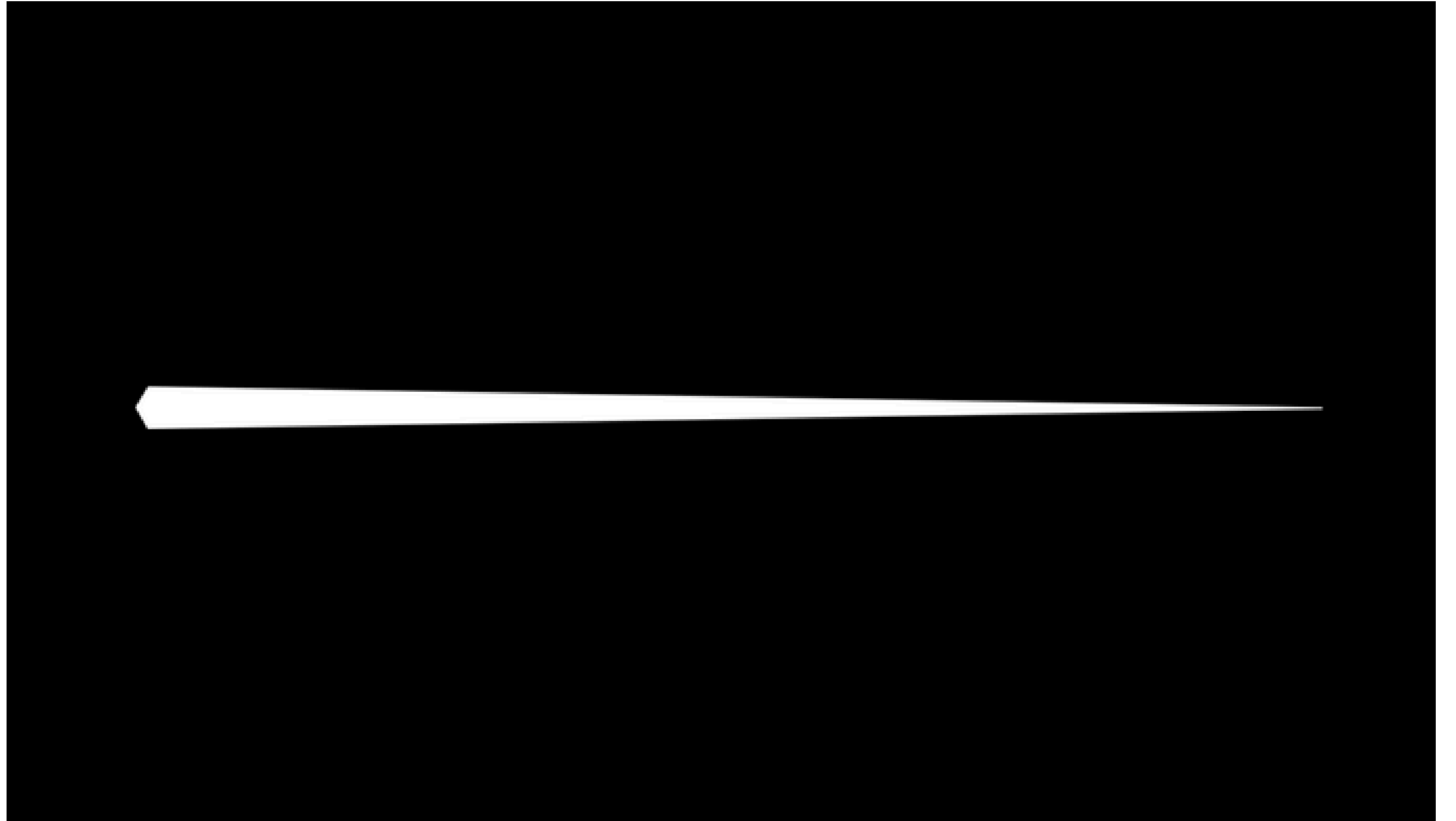
FLOWER BLOOMING



Structure of nature - Waves

Nature at the smallest scales is thought to be composed of something wave-like. Waves are also the basis of music, and they yield beautiful visual form in addition.

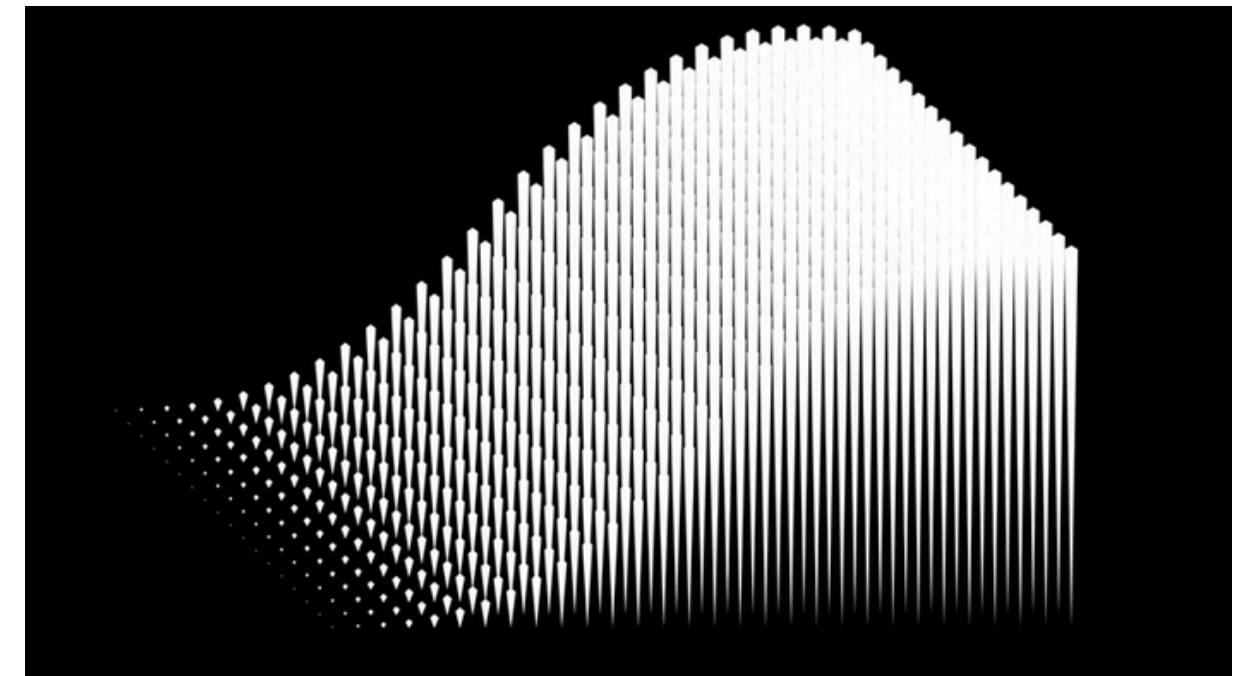
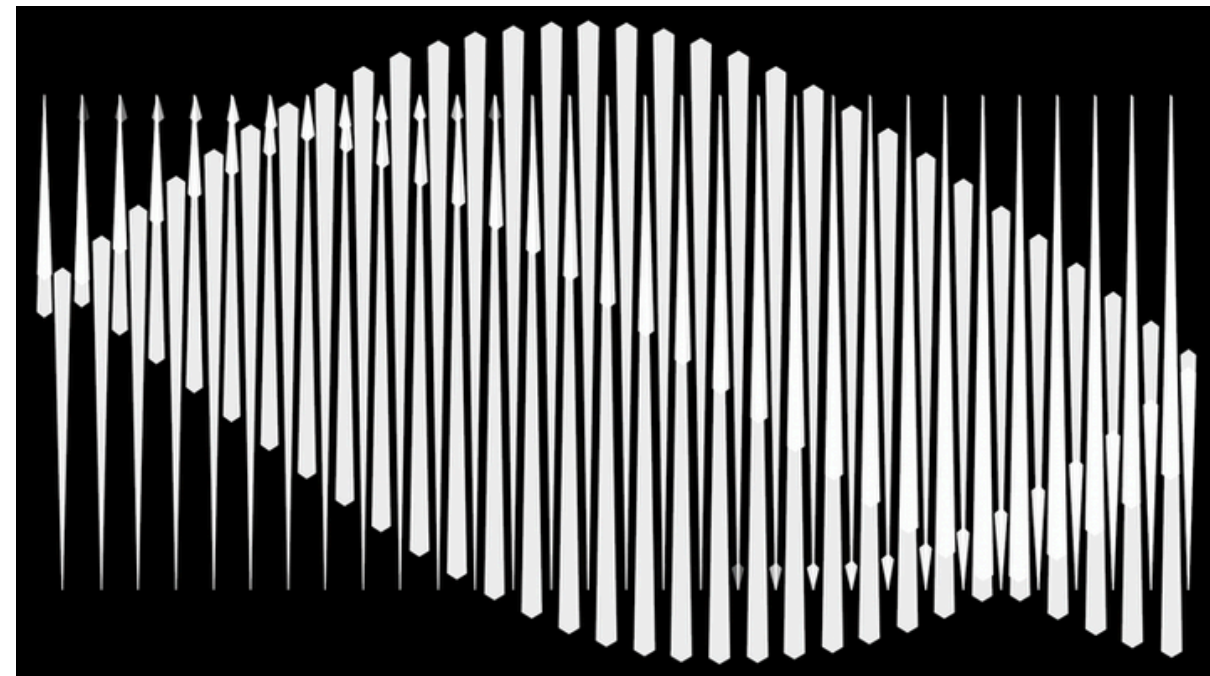
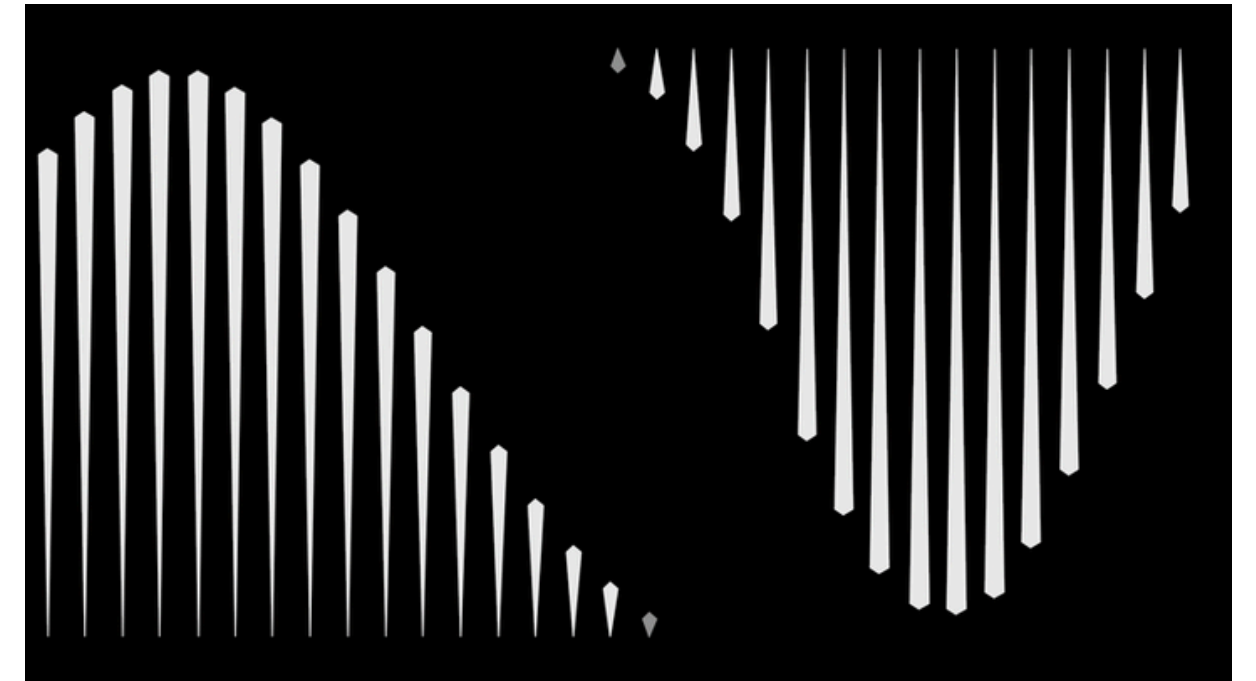
Max chose the concept of waves for part of the Emergence story, because they are a very important idea in much of our understanding of the world around us, and within us. They form the basis of light and wireless communications, and our source of energy from the sun which creates almost all plant and animal life.

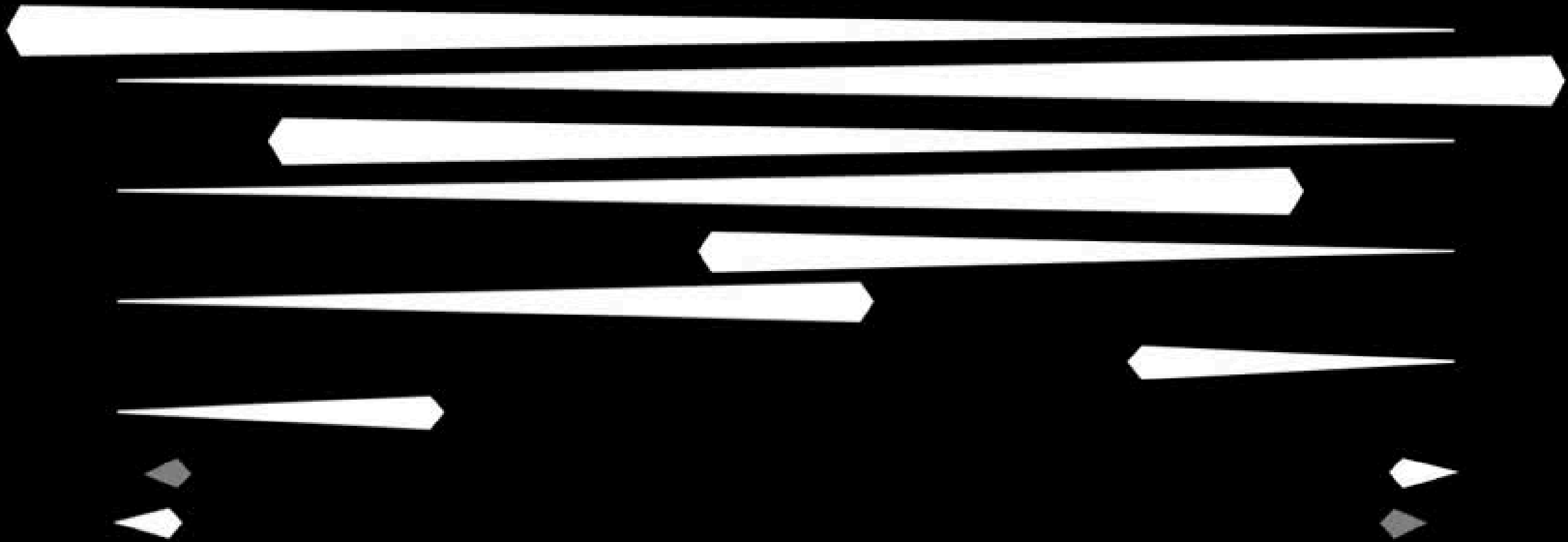


I choose to copy it because it helped me realise that one of the most basic elements of the world is not complexity, but simple structures and rules.

The animation begins with a single particle creating a small wave. At first, it looks very simple, almost minimal. However, as the wave continues to develop, repeat, and interact, it gradually forms many unexpected and complex visual effects. This process surprised me deeply.

What interested me most is that the complexity of the animation is not designed directly at the beginning. This made me understand that complex visual forms can come from basic elements and simple systems.





THAT'S ALL
THANKS FOR
WATCHING