

DRUM OF STARS

Anthony Teston







 Tambour des astres
 @DrumOfStars

To discover, get informations or buy Drums
www.tambour-des-astres.fr
 contact@tambour-des-astres.fr

Cosmogram

The *Drum of stars* captures a fragment of cosmos. Its light, both soft and powerful, fascinates and soothes us like the silent embers of a campfire.

At the crossroads of art and science, this symbolic artefact speaks about generation, space and multitude. The tangled threads form a so called *mutagram*, static representation of a mathematical process. The *Drum of stars* is like the Chinese Yi Jing: it spells out cycles and mutations through *combinatorial* art, an ancestral know-how of the vast mathematical empire. We contemplate the image of a transformation that affects an entire mathematical space with one gesture.

The contrast between the density of the threads at the edge and in the center of the disc, together with the dispersion of light, breathes depth and volume to the *mutagram*. Mathematics turns into a luminous star and a well of contemplation that provides peace and condition conducive to the wandering of soul. The lattice of stretched threads reveals symmetries and fractal scales games, witnesses of mathematical orders. And also, following our imaginations, known figures of our realities: wolf, turtle, frog, crow, prior, tribal mask, vase, cosmic web...

The *Drum of stars* is a reflection of mathematical laws as much as a metaphor for abundance and life; a place of dialogue between *mechanical logic* and *organic vitality*. By inscribing forms to be contemplated, it signifies to us that the universe is a causal and material machine, as much as a *being* populated by spirits and constantly flourishing with life.

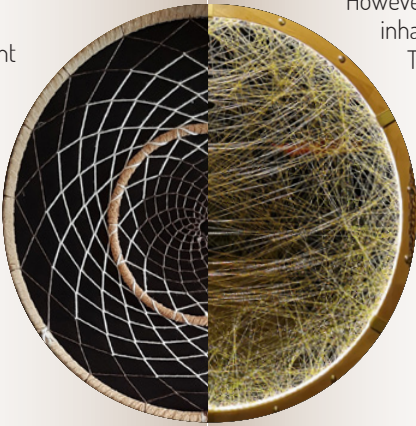
The *Drum of stars* is a mathematical, graphological and spiritual object, in other words, a *cosmogram*.

Drum of stars, a cousin of the Dreamcatcher

With its spider web shape, the *Drum of stars* evokes the Dreamcatcher, an artifact of North American native cultures. Although it does not take over its essential function, it however has – like its ancestral cousin – a symbolic and spiritual vocation.

Dreamcatchers drive away bad dreams acting as filters. They capture the dreams sent to us by the spirits, preserve the beautiful sights of the night and burn away the bad visions at the first light of day. According to Huron culture, the dream is the vehicle that allows the exchange between Men and the Great Spirit that encompasses them. By expressing the soul’s needs – as essential to satisfy as body’s needs – the dream thus helps to ensure balance.

In turn, the *Drum of stars* tells us that the universe around us is as much driven by the mechanics of matters as it is inhabited by life and spirit; and that it grows in this equilibrium. It soothes those who contemplate it and helps to lead serene thoughts.



Creation process – science and art

Holder of master degrees of *Particle Physics* and *History & Science Communication*, I’ve worked for various French institutions such as the CNRS, the Paris Observatory, the Institute of the Two Infinities Physics and the Institute of Origins, in Lyon. I also worked in the cultural field by organizing conferences or workshop questioning science and its interactions with society, art and culture.

I’m interested in the status of science, wondering what it imprints upon individuals and society, and I seek ways to hybridize it with other approaches. At the heart of my questions is the nature of reality, being, matter and space. Leaned back on contemporary scientific knowledge, my approach is a follow-up to this metaphysical aim, using writing, mathematics, art, craftsmanship.

When it comes to *Drums* and *mutagrams*, my job is to develop algorithms to list permutations and their properties... This “mapping” is part of a set of more general questions about space. The particular question that drives me here could be formulated as follows: *to what extent can a space of permutations be familiar to ordinary euclidean space?*

The *Drum of stars* is a tangible extraction of this work. It brings a *fragment of cosmos* into our places of life, our homes, our cultures.

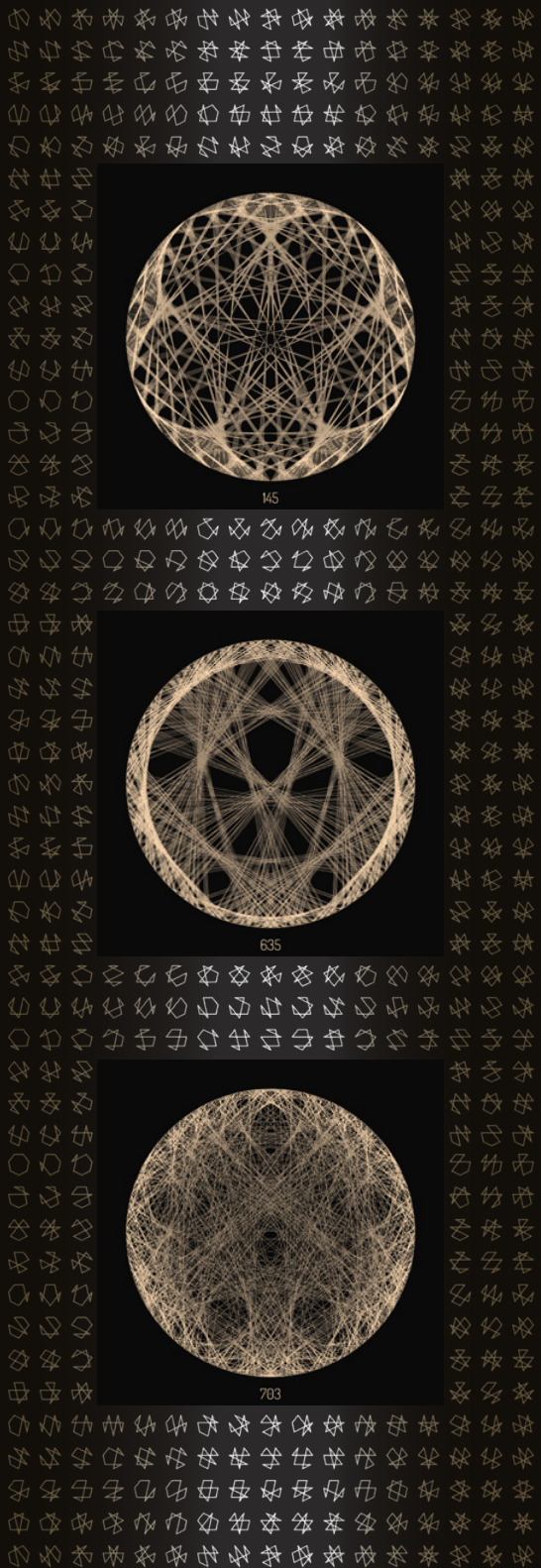
Very close to science: life

The father of modern science, Galileo, thought that “the book of the universe is written in mathematical language”. Since then, and in light of our technical skills, this idea has never been as culturally rooted as nowadays.

However, the universe is also – and perhaps above all – a world inhabited by an overflowing life that populates it with spirits.

The *Drum of stars* reminds us of this idea, through a powerful vision aroused by figures that our glance recognizes: we see there the symmetries of mathematical orders coexisting with an organic profusion and its intensities...

Unlit, it evokes a tambourine, a sieve, or the wind undulations in a wheat field. The object seems extracted from our countryside and attached to terrestrial life. But when it lights on, suddenly, a star enlights up; we are snapped up in a soft and deep light, as flung into our own hypnotized mind.



Manufacturing

Depending on materials and techniques, manufacturing a *Drum of stars* requires several weeks or months. This achievement is based on a patient construction rooted in time and leans on a wide range of knowledge and know-how: mathematics, algorithms, graphic design, woodworking, history of science and ideas. Each *Drum* is numbered according to the *mutagram* it reproduces.

Different techniques and mediums are used which allow to propose various enhancements of *mutagrams*. Some *Drums* are made with ancient cart wheels, offering an aesthetic that combines chiselling and rusticity. Others are manufactured from scratch and hide the technical elements for a clean and light look. Still others can be made from metal hoops, for monumental *Drums*, or *Drums* with a raw appearance. Finally, some can use a shadow gap frame and approach the absolute purity of *mutagrams*.

The *Drums* manufacturing is a permanent research that renews mediums, materials, wood species and light. Mathematical investigations and developments of new forms of *mutagrams* constitute the other side of this exploratory work.

Terra Mathematica

The *Drums of stars* starting point is in the area of mathematics so called *combinatorics*. Its subject is to count and characterize all sorts of combinations of elements. “*Permutations*” are an example of such combinations. Their particularity is to be composed of a precise set of elements – for example “ABCDEF” – which are swapped each others to form other combinations. ABCDEF can then become AEBCDF or CFEDBA etc. Thus, from 6 elements, it is possible to make 720 different combinations.

The *Drums of stars* transposes into matter figures so called *mutagrams*. A *mutagram* is the image of a particular transformation that modifies each combination into another in a well-determined way. Each of the 720 threads that make up a *Drum* thus represents the mutation of one combination into another – located elsewhere on the circle –, among the 720 that exist.