Julian Voss-Andreae’s sculptural installation Spannungsfeld for the University of Minnesota’s new Physics and Nanotechnology Building was inspired by a view of the human body through the lens of quantum physics.

PROJECT DETAILS

Submitter Name + Company: Julian Voss-Andreae
Submitter Location: Portland, Oregon, USA
Client Name + Company: University of Minneapolis
Project Name: Spannungsfeld
Project Location: Minneapolis
Project Type: Public art
Materials: Stainless steel, granite
Size: 12’ x 70’ x 6’ (4 x 21 x 2 m)
Budget: $319,000
Start/Finish Dates: 2013-2014
The German title of the installation (literally “tension field”) originated in physics but is used in contemporary German almost exclusively in a metaphorical sense, implying a dynamic tension, often between polar opposites, that permeates everything in its vicinity.

Spannungsfeld is made up of two 10’ (3m) tall figures in a basic kneeling pose, a male, and a female, facing each other. The two figures represent nature’s omnipresent
pairs of opposites. These dualities are a fundamental facet of nature and are found in Western science as well as in Eastern traditions. They are critical to the emergence of new levels of meaning in science, and, in the case of the two human genders, critical to the emergence of life.

Like the positive and negative electric charge in physics or the yin-yang in Chinese philosophy, neither woman nor man can exist without the other.

Inspired by quantum physics, the artist’s professional background, Voss-Andreae developed an approach that transforms the human figure into a large number of vertically arranged, parallel steel slices with constant spacing. This style creates the impression of a three-dimensional topological map, evoking the fundamental scientific act of measuring the world. The
Winner: Education
visual effect this style produces is striking and echoes quantum physics’ paradoxical nature and its critical dependence on the observer’s point of view: On first glance appearing to consist of solid steel, the sculptures virtually disappear as the viewer moves past them, enticing the audience to interact playfully with these works. Conceptually, it is the very act of analysis through dissection that reveals the interconnectedness of the figures - both sets of slices comprising the figures fall on the exact same planes and therefore appear as a continuation of each other and as manifestations of the same underlying ‘field’. As quantum physics suggests, and Eastern traditions have stressed for centuries, the world is fundamentally one, and everything and everybody we see is but a manifestation of an underlying wholeness. Like in the history of science leading up to quantum physics, the application of the reductionist knife eventually forced us to see that nature, in its very essence, is indivisible.
Winner: Education
Winner: Education
Julian Voss-Andreae is a German sculptor based in Portland, Oregon. Starting out as a painter he later changed course and studied physics, mathematics, and philosophy at the Universities of Berlin, Edinburgh and Vienna. Voss-Andreae pursued his graduate research in quantum physics, participating in an experiment considered one of the modern milestones of unifying our everyday intuition with the famously bizarre world of quantum physics. He moved to the United States to study Sculpture at the Pacific Northwest College of Art from where he graduated in 2004.

Voss-Andreae's work, often inspired by his background in science, has captured the attention of multiple institutions and collectors in the United States and abroad. Recent institutional commissions include large-scale outdoor monuments for Rutgers University, the University of Minnesota, Texas Tech University, and the Georgia Institute of Technology. Voss-Andreae's work has been featured in print and broadcast media worldwide.

My goal is to convey elements of our spiritual essence and open our eyes to the miraculous nature of the underlying nature of reality."

“The lessons of quantum physics offer us a glimpse of a different way of dealing with each other and dealing with our world and I feel it is critical that those embryonic ideas get out into the cultural mainstream.”