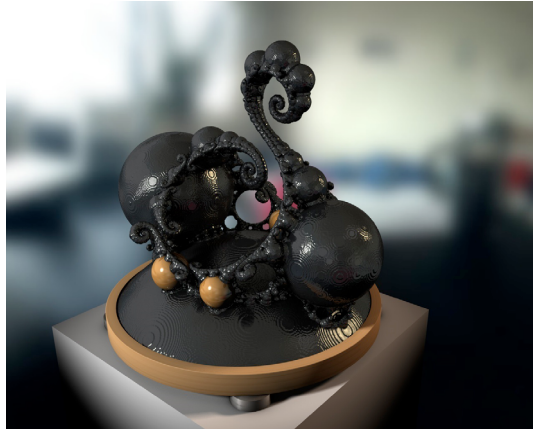


Torsten Stier 42



Bio:

Born in 1966 near Mainz Torsten Stier came to visual arts at the age of almost 30. Among others, his love for graphic design developed during the study of architecture. His free hand drawings and graphic compositions were presented several times among the best term papers.

End of the 80's Torsten became aware of fractal geometry and chaos theory, its practical application. Since then he intensively deals with the theoretical basics as well as the philosophical implications of this unusual math. 2010 he discovered the newly developed tools for 3d fractal generation and became one of the leading representatives of this young branch of art.

After winning some international competitions for fractal art, Torsten has entered the regular art market since around 2013. He is a founding member of the artist group „Bunte Armee Fraktion“ and made a name for himself in solo and group exhibitions. Thereby, he often connects visual art with musical entertainment. Among others his works were shown in Spain, Korea and Bosnia and Herzegovina. Within Germany his stations were Mainz, Wiesbaden, Frankfurt, Offenbach, Kaiserslautern, Worms and Nürnberg. The sculpture 42 is Torstens first completely 3d printed work.

Project description:

42 – a critical model of particle physics

The sculpture 42 visualises a nasty problem of modern physics and its possible extensions like stringtheories in a critical-ironic way.

The title is a reference to Douglas Adams' novel the hitchhikers guide to the galaxy. There 42 is the answer to the ultimate question of life, the universe, and everything – a theory of everything so to speak. Like the protagonists in Adams' novel, we can't do anything with the answers of stringtheories, as we could not ask a single question, to check these theories. The only argument for their correctness is their elegance. So they might be a possible math model of reality, but barely a scientific theory.

Related to the volume, the sculpture reflects the precise relation between visible matter, represented by the light balls at the base and dark matter and dark energy, represented by the black part. Dark matter and dark energy together make up 95,1% of our universe and can't be assigned to any specific phenomenon. Thus they are also only possible math models of reality, in this case to bring observation and theory in accordance.

The question concerning the usefulness of such models must be allowed here!

Mathematical inspiration:

The model bases on a 3-dimensional version of so called limit sets of Kleinian Groups. This type of fractals have their origin in the work of Felix Klein, Robert Fricke and Henri Poincaré around the turn of the 19th and 20th century. They are packings of touching spheres. As in theory the spheres are touching, but not intersecting, these fractals are not connected. In order to create a connected model, the hulls of the spheres have a certain thickness, so the spheres in the model are intersecting and merging at small radiusses.

