

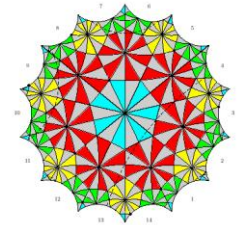


Math in Art

Create an Art project that is based on a mathematical principle. The Mathematics should be Intrinsic, that is, the mathematics should be a natural, integral part of the artistic project rather than an added, superficial aspect. For example: knitting a scarf with a pattern that includes " $a^2 + b^2 = c^2$ " is an extrinsic mathematical content. The use of similarity to construct a fractal pattern, tessellation or Fibonacci pattern is intrinsic mathematical content.

Write a detailed description of the Mathematics of the piece.

The following list of projects is by no means exclusive, but provides a sense of the kinds of artistic activities I envision:



Celtic knots
Conceptual art
Dahlia designs
Fractal design
Frieze and wallpaper patterns
Inca quipus
Islamic tilings
Temari ball

Kaleidoscope design
Mosaics
Kirigami/paper cutting
Logos and symbols
Network schematics
Origami/paper folding
Polyhedral sculpture
Sona sand drawings

