

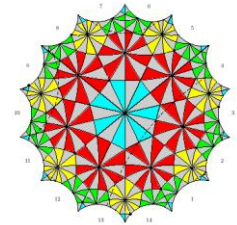


Math in Art

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

