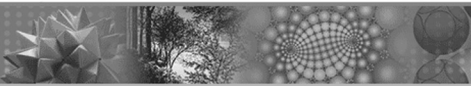


MATHEMATICAL IMAGERY



PRESENTED BY THE AMERICAN MATHEMATICAL SOCIETY

MATHEMATICAL IMAGERY



AMS Home :: Math Imagery Home :: Galleries & Museums :: Articles & Resources :: Most viewed :: Search

The connection between mathematics and art goes

back thousands of years. Mathematics has been used in the design of Gothic cathedrals, Rose windows, oriental rugs, mosaics and tilings. Geometric forms were fundamental to the cubists and many abstract expressionists, and award-winning sculptors have used topology as the basis for their pieces. Dutch artist M.C. Escher represented infinity, Möbius bands, tessellations, deformations, reflections, Platonic solids, spirals, symmetry, and the hyperbolic plane in his works.

Mathematicians and artists continue to create stunning works in all media and to explore the visualization of mathematics--origami, computer-generated landscapes, tessellations, fractals, anamorphic art, and more.

A mathematician,
like a painter or poet,
is a maker of patterns.
If his patterns are more
permanent than theirs,
it is because they are
made with ideas.

—G. H. Hardy,
A Mathematician's Apology

Explore the world of mathematics and art, send an e-postcard, and bookmark this page to see new featured works.

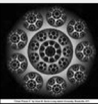
Thomas Hull :: The mathematics of origami



This is a version of the Owl-Hull "Five Intersecting Circles" which should be a familiar sight to those who frequent geometry textbooks. Read about the Gallery.

--- Thomas Hull. Photograph by Nancy Rose

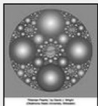
Anne M. Burns :: Gallery of "Mathscapes"



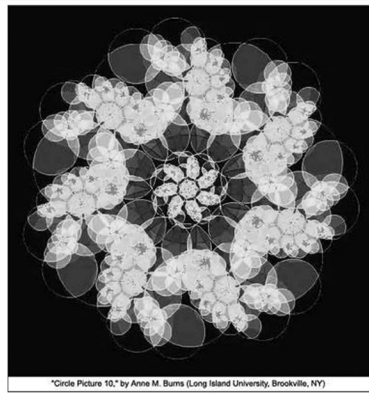
Computers make it possible for me to "see" a gallery of "Mathscapes" were created using a

--- Anne M. Burns

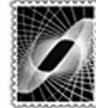
Notices of the American Mathematical Society :: Cover Art



People have long been fascinated with repeating patterns and symmetries. The discovery of hyperbolic geometry has led to a greater wealth of patterns, some popularized by Dutch artist M. C. Escher in his Circle Limit series of works. The cover illustration on this issue of the Notices portrays a pattern which is symmetric under a group generated by two Möbius transformations. These are not distance-preserving, but they do preserve angles between curves and they map circles to circles. See Double Cusp Group by David J. Wright in Notices of the American Mathematical Society (December 2004, p. 1322).



"Circle Picture 10," by Anne M. Burns (Long Island University, Brookville, NY)



Dear Peter,
Here's one of the
e-postcards from
the site.

Nancy

GALLERIES & MUSEUMS ::::: ARTICLES & RESOURCES :::::

Bridges: Mathematical Connections in Art, Music, and Science
M.C. Escher: the Official Website
Images and Mathematics, MathArchives
The Institute for Figuring
Kalendar, by Herwig Hauser
The KnotPlot Site
Mathematical Imagery by Jos Leys
Mathematics Museum (Japan)
Visual Mathematics Journal

Art & Music, MathArchives
Geometry in Art & Architecture, by Paul Calter (Dartmouth College)
Harmony and Proportion, by John Boyd-Brent
International Society of the Arts, Mathematics and Architecture
Journal of Mathematics and the Arts
Mathematics and Art, the April 2003 Feature Column by Joe Malkevitch
Maths and Art: the whistlestop tour, by Lewis Dartnell
Mathematics and Art, (The theme for Mathematics Awareness Month in 2003)
Viewpoints: Mathematics and Art, by Annalisa Crannell (Franklin & Marshall College) and Marc Frantz (Indiana University)

www.ams.org/mathimagery