DALHOUSIE MATHEMATICS COLLOQUIUM

Thursday October 4 2018, 2:30 pm, Chase 319 Speaker: Larry Ericksen

Mathematics in the Fine Arts

In this talk, we illustrate how mathematical concepts have influenced the development of the fine arts, from the Parthenon to classical sculpture and numerous famous paintings. The golden ratio and the Fibonacci spiral has been used in art from classical times. Artists from Da Vinci and Michelangelo to Dali and Mondrian have employed these mathematical structures.

In the fine arts and crafts movements, mathematical arrangements of geometric patterns have been used to evoke emotional or intellectual responses. We show how artists have employed mathematical objects to create lattice patterns, mosaic tilings, tessellations, Escher designs, and Penrose tilings.