Professor Kenny Ascher publishes work in prestigious math journal

Ascher’s research delves into complex geometric shapes in two complex dimensions.

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Professor Kenny Ascher of the UCI Department of Mathematics.

Picture Credit:
Kenny Ascher

Professor Kenny Ascher of the UC Irvine Department of Mathematics recently published research in the journal *Inventiones mathematicae* – one of the premier academic journals in math. The work Ascher and his colleagues published describe novel ways of classifying certain complex geometric shapes in two complex dimensions. “For over 100 years, mathematicians have been fascinated with the properties and classification of geometric shapes known as K3 surfaces,” said Ascher. “K3 surfaces are beautiful mathematical objects that are also intensively studied within core models of string theory. Recently, there’s been tremendous progress in a subject known as K-stability — a sort of bridge between two fields of math known as algebraic and differential geometry. In this paper, we used many of these recent advancements in K-stability to solve a major problem regarding the geometry and classification of K3 surfaces.”

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