The complex interplay of mathematics and art through borosilicate glass

Anduriel Widmark

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Date Created: 2024
Dimensions: 18x10x10 in.
Materials Used: Borosilicate Glass

Statement

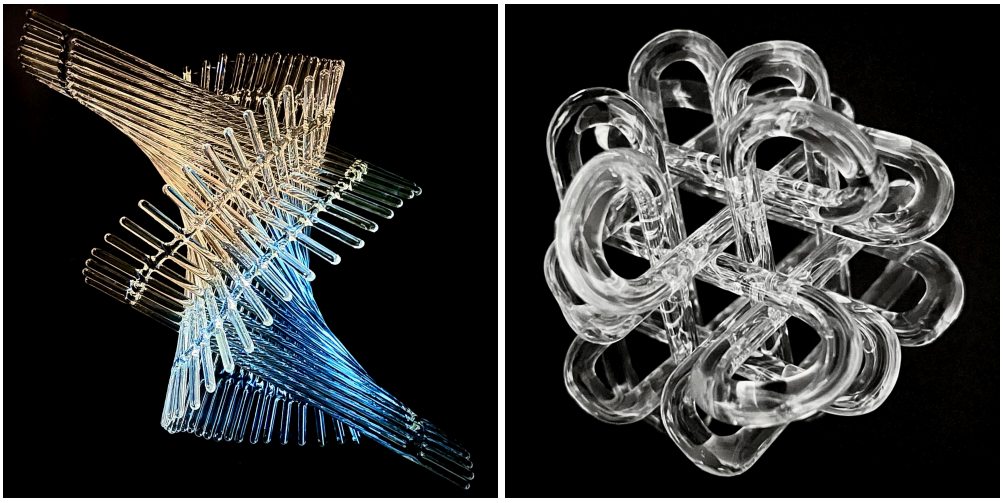
I create sculptures and images that celebrate the intricate patterns that shape our world. Inspired by this underlying geometry, I use borosilicate glass to bring mathematical ideas to life in tangible form. These works range from spirals and knots to interwoven planes, reflecting a variety of abstract concepts. They offer a playful exploration of the intriguing connections and patterns that arise when art and mathematics come together.

Description

My latest work with borosilicate glass explores geometric forms like the helicoid, knots, and Möbius strips. Using flame-working techniques, I manipulate the glass to transform these complex ideas into physical and striking forms. Each sculpture is a blend of precision and playful elements. Clear rods are joined together in symmetric non-intersecting arrangements that invite viewers to reflect on the boundaries between form and emptiness. This work not only presents artistic and technical challenges but also melds scientific inquiry with artistic expression.

Designer(s) Biography:

Anduriel Widmark is a visual artist who blends art and mathematics, transforming complicated ideas into dynamic paintings and glass sculptures. His work features vibrant, abstract forms and detailed geometric structures. He frequently exhibits internationally, including at the Bridges Math Art Conferences, Joint Mathematics Meetings, and the Mathematical Association of America. Anduriel's art explores systems and relationships to develop unique perspectives, celebrating the patterns that shape our world.



(a) (b)

(c)

Figure 1: *Glass sculpture. (a) 'Tangent Helicoid,' flameworked borosilicate glass, 18x10x10in. 2024, (b) 'Hemistix 24 Knot,' flameworked borosilicate polystix glass knot, 6x6x6 in. 2024, (c) 'Möbius Strip Quarter Twist,' flameworked borosilicate glass, 12x12x6 in. 2022.*