

Dennis Bromley, Samantha Pezzimenti, Marina Skyers

Student, Associate Teaching Professor of Mathematics, Assistant Teaching Professor of Mathematics
Penn State Brandywine
Media, Pennsylvania

Samantha Pezzimenti and Marina Skyers teach mathematics at Penn State Brandywine. They are interested in the ways artistic representations and physical models can help students understand abstract mathematical concepts. Dennis Bromley is an Actuarial Science student at Penn State Brandywine and a long-time crocheter. He enjoys exploring ways that mathematical properties can be represented through crochet and can always be counted on to bring the whimsical ideas of his professors to fruition.



Family Tree of Honey Bees, 13.5 x 10.5 in,
Print of crocheted piece, 2024

Our three crocheted models exhibit connections between honeybees, golden hexagons, and the Fibonacci sequence. The first model (1 of 3) exhibits the family tree of honeybees through the tenth generation. Brown beads represent male honeybees and yellow beads represent female honeybees. The number of bees at each iteration follows the Fibonacci sequence.