

For Immediate Release: November 13, 2025
AWM Honors 2026 Dissertation Prize Winners
Naghmeh Akhavan and Tejasi Bhatnagar

Naghmeh Akhavan is recognized for her 2025 dissertation, *Mathematical Modeling of Border Cell Cluster Migration in Drosophila Melanogaster*, written under the direction of



Bradford E. Percy at the University of Maryland, Baltimore County. She is currently a postdoctoral assistant professor at the University of Michigan.

Dr.

Akhavan's dissertation is truly groundbreaking in both scope and execution. By demonstrating how extracellular geometry regulates chemoattractant landscapes and by pioneering a new phase-field framework with the tangential interface force, she has opened avenues of inquiry that were not previously attempted in mathematical biology. Her work is rigorous and original—integrating mathematics and biology in ways that will both impact and influence mathematical models in cell migration.

Response from Naghmeh Akhavan I am deeply honored to receive the AWM Dissertation Prize. I would like to thank my advisor, Dr. Brad Percy, for his guidance and support, as well as my collaborators and mentors who have shaped my research journey. I am also grateful to my family and friends for their constant encouragement and to the AWM for its dedication to supporting women in mathematics. This recognition inspires me to continue advancing mathematical biology and mentoring future scientists.

Tejasi Bhatnagar is recognized for her dissertation, *Monodromy results for abelian surfaces and K3 surfaces in characteristic p* written at the University of Wisconsin-Madison in 2025 under the direction of Ananth Shankar. She is currently an NSF postdoctoral fellow at the Ohio State University.



Dr.

Bhatnagar's

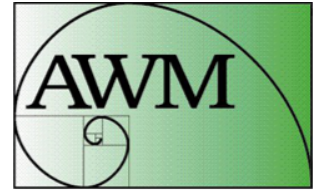
research is in

algebraic and arithmetic geometry in positive and mixed characteristic. In her thesis, Bhatnagar provided a very satisfactory description of the p-adic monodromy representation of ordinary Kuga–Satake abelian variety A over the equal characteristic local field $K = \mathbb{F}_q((t))$ with bad reduction (here q is a p power) based on its reduction type. Bhatnagar's theorem on monodromy is not only an important theorem in itself, but also opens new directions for future research. As a consequence of this theorem, Bhatnagar proved a finiteness result on reductions of the p -power Hecke orbit of A in the orthogonal Shimura variety when the abelian part of the reduction of A is supersingular. Bhatnagar is described as a strong, independent, talented, creative, and versatile mathematician. “Bhatnagar has shown herself to be both independent and wide-ranging in her interests within the subject, and most relevant for this prize, she wrote a really first-rate dissertation.”

Response from Tejasi Bhatnagar I am very honored to receive this prize and deeply thankful to AWM for recognizing my thesis. I am indebted to my advisor, Ananth Shankar for his

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mathematics, mentorship and generosity. I sincerely thank Jordan Ellenberg and Yunqing Tang for their constant encouragement. My time at UW-Madison was profoundly influenced by my friends and the vibrant mathematics

community there, to whom I am very grateful. I thank my partner, Nitin, for his unwavering support. Finally, this prize belongs as much to my parents as it does to me — thank you to them for everything.

The AWM Dissertation Prize was established in 2016, an annual award recognizing exceptional work in a dissertation defended in the last 24 months. The award is intended to be based entirely on the dissertation itself, not on other work of the individual. Learn more at www.awm-math.org. The prizes will be presented on January 03, 2024 during the Joint Prize Ceremony at the Joint Mathematics Meetings in San Francisco, CA. Full Citations and responses from the prize winners are posted at AWM Dissertation Prizes 2025.