Paul R. Halmos - Lester R. Ford Awards

John B. Little

"The many lives of the twisted cubic," *The American Mathematical Monthly*, 126(7), 579–592. 10.1080/00029890.2019.1601974

Beautiful ideas have a tendency to continue to show up over and over in mathematics in many different forms. One of these beautiful ideas is the twisted cubic (in one form expressed as (t,t^2,t^3)) and the author takes us on a journey from the mathematics of ancient Greece through projective space, into differential and algebraic geometry, and through Bézier curves and algebraic statistics. This winding and scenic road that the author has taken us on shows us the amazing power and versatility that lies in simple ideas.

Response

It is a complete surprise and great honor to receive a Halmos-Ford Award for my article "The Many Lives of the Twisted Cubic" published in the *American Mathematical Monthly*. I would like to thank the MAA for this recognition and also for publishing the *Monthly*, an outlet where works of mathematical synthesis and exposition can find a home. Finally, I would like to thank my frequent collaborators David Cox, Don O'Shea, and Hal Schenck for their encouragement.

Biographical Sketch

John B. Little is Professor of Mathematics in the Department of Mathematics and Computer Science at the College of the Holy Cross in Worcester, Massachusetts, where he has taught since 1980. He received his AB from Haverford College in 1976 and his PhD from Yale University in 1980. His research interests are in algebraic geometry and commutative algebra, computational methods, and applications to areas such as error-control coding theory. He has published several textbooks, including *Ideals, Varieties, and Algorithms* (coauthored with David Cox and Don O'Shea) which won an AMS Steele Prize for Exposition in 2016. He has been active as a mentor for undergraduate research projects at Holy Cross and in the SIMU, PREMUR, MSRI-UP, and PURE Math summer programs promoting diversity and inclusion in the mathematical sciences.