

Dr. Joann Ellis-Monaghan

Dr. Ellis-Monaghan has an undergraduate degree in studio art (painting and ceramics) from Bennington College. She received her Master's degree in mathematics from the University of Vermont, and Doctorate from the University of North Carolina at Chapel Hill. Dr. Ellis-Monaghan's mathematical research is in the areas of graph theory, algebraic combinatorics, and applied combinatorics. She works with a variety of graph polynomials, constructing them and embedding them in algebraic structures sufficiently rich to extract new information from them. She also applies graph theoretical techniques to problems from statistical mechanics and computer chip design, and, more recently, to problems from DNA nanostructures and biomolecular computing. She is currently a full Professor at St. Michael's College in Colchester, VT.