

1096-AE-1947      **Joanna A. Ellis-Monaghan\*** ([jellis-monaghan@smcvt.edu](mailto:jellis-monaghan@smcvt.edu)), Saint Michael's College, One Winooski Park, Colchester, VT 05439. *Polynomials of graphs in surfaces.*

Historically, graph polynomials have had either abstract or plane graphs as their domains. Recently however, graph polynomials have taken on a topological flavor, with several classical polynomials being extended to graphs embedded in surfaces. These include the topological graph polynomials of Las Vergnas, Bollobas-Riordan, Krushkal, Penrose, and the topological transition polynomial. We will survey these polynomials, the interrelations among them, and new results on how they encode topological information about embedded graphs. (Received September 16, 2013)