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Thomas W. Tucker* (ttucker@colgate.edu), 406 Williston Rd, Box 163, Sagamore Beach, MA 02562, and **Jonathan L. Gross**. *Partial-Triality Polynomials for Ribbon Graphs: Part II*. Preliminary report.

This talk focuses on the general structure of partial-duality and triality polynomials. A finite sequence $a_1 \dots a_n$ is *interpolating* if all terms are nonzero. The nonzero coefficients of a partial-* or partial-* \times * polynomial are interpolating, but computer calculations on small examples for the other operators exhibit complicated non-interpolating behavior. Log-concavity has been proved for some families, but fails in general again for small computer calculations. On the other hand, there does seem to be interpolating and LC behavior in the even and odd degree coefficients separately. Some of the partial-polynomials exhibit edge-deletion/edge-contraction behavior in the case of edges incident to a vertex of valence 2 or to a face of size 2, giving hope for a relationship with the Bollobas-Riordan polynomial, analogous to Chmutov's work for partial-* duality. (Received February 11, 2021)