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Tucker (ttucker@colgate.edu), Hamilton, NY 13346. Partial Duals of Oriented Embeddings.

We explore Chmutov's construction of partial duality as a topic of independent interest. Our perspective is largely that of rotation systems and permutations. As our main result, we derive a formula for the genus of a partial dual of an embedding, which is related to a problem posed by Moffatt. We use the main formula to calculate the partial-dual genus polynomials for a couple of infinite sequences of embedded graphs. (Received September 13, 2018)