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Sergei Chmutov* (chmutov.1@osu.edu), 1760 University Drive, Mansfield, OH 44906. *Partial Duality of Hypermaps.*

I explain a generalization of partial duality of ribbon graphs to hypermaps. Combinatorially, hypermaps may be described in one of three ways: as three involutions on the set of flags (bi-rotation system or τ -model), or as three permutations on the set of half-edges (rotation system or σ -model in orientable case), or as edge 3-coloured graphs. I express partial duality in each of these models. Time permitting I will give a formula for the genus change under the partial duality. This is a joint work with Fabien Vignes-Tourneret. (Received February 02, 2021)