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J. D. Quigley* (jqigle2@nd.edu), 255 Hurley, Notre Dame, IN 46556. *The Mahowald invariant in motivic, equivariant, and classical stable homotopy theory.*

The Mahowald invariant is a method for constructing nontrivial classes in the stable homotopy groups of spheres from lower dimensional classes. I will recall this construction and some classical computations, then discuss analogs in the motivic and C_2 -equivariant settings. In particular, I will explain how functors between the motivic, equivariant, and classical stable homotopy categories can be leveraged to make computations across contexts. (Received January 16, 2018)