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Florian Frick* (frick@cmu.edu). *The topology of projective codes and the distribution of zeros of odd maps.*

I will present a generalization of the Borsuk–Ulam theorem that provides information about the structure of zeros of a collection of odd, real-valued maps defined on spheres. Quantitative bounds depend on the size of codes in real projective space. I will mention several applications of this result in combinatorics and discrete geometry.

This is joint work with H. Adams and J. Bush. (Received August 09, 2021)