Armin Schikorra* (armin@pitt.edu), Thackeray 301, Pittsburgh, PA 15260, and Jean Van Schaftingen. Measuring the Hopf Degree in fractional Sobolev Spaces.

The degree of a map between two spheres of same dimension can be estimated by Sobolev norm of said map (of the right class). In this talk I will discuss to what extend this is possible for the Hopf degree as well – and why the estimate we have is “analytically optimal” but probably not “topologically optimal”. Joint work with J. Van Schaftingen. (Received January 13, 2019)