1145-28-1718 Michael Hinz* (mhinz@math.uni-bielefeld.de) and Daniel J. Kelleher. Differential forms on products of fractals. Preliminary report.

During the recent years differential one-forms on fractal spaces have been studied by various authors. In this talk we consider products of fractals and explain a way to introduce higher order differential forms on them. We discuss how these forms can be approximated by antisymmetric functions on products of graphs and why this is a correct point of view. Our simple guiding example is the case of two-forms on the product of two Sierpinski gaskets. The talk is based on recent work in progress with Dan Kelleher (Mount Holyoke College). (Received September 24, 2018)