Michael Hinz* (Michael.Hinz.1@uni-jena.de), Department of Mathematics, 196 Auditorium Rd., University of Connecticut, U-3009, Storrs, CT 06269, and Alexander Teplyaev. Vector equations on fractals.

Starting from recent definitions of 1-forms via tensor products and energy norms, we propose some analogs of classical notions from vector analysis and utilize them to investigate some vector equations on fractals. (Received September 21, 2011)