1171-46-87 **Daniel E Spector*** (`spectda@protonmail.com`). *A Sobolev Inequality for the Fractional Gradient.*

Among the various choices of fractional derivatives in several dimensions, the "fractional gradient" appears naturally when one seeks an analogue of the gradient which preserves various structural properties. In this talk I will introduce what I term the fractional gradient and present a new proof of a Sobolev inequality involving it in the L1 regime. (Received August 08, 2021)