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**Mikil Foss\*** (mfoss3@unl.edu). *Traces on General Sets without Differentiability.*

A common class of nonlocal operators has a convolution like structure. If the kernel is integrable with an integrable then the operator is generally insensitive to the values of a function on sets of zero measure. Thus, for associated nonlocal problems, the analogue of a Dirichlet-type boundary condition is a volume-constraint, where the value of a solution is prescribed on a region of positive measure. I will present some conditions under which a trace for a function can be identified on a set with strictly positive codimension. The conditions are compatible with nonlocal problems where operators with integrable kernels are employed. The functions are required to satisfy an oscillation constraint that does not require any differentiability away from the boundary. The assumptions also allow domains with very rough boundaries that possess cusp-like features. (Received August 17, 2021)