

**AN EXAMPLE PERTAINING TO THE FAILURE OF
THE BESICOVITCH–FEDERER STRUCTURE
THEOREM IN HILBERT SPACE**

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Abstract: We give an example, in the infinite dimensional separable Hilbert space, of a purely unrectifiable Borel set with finite nonzero one dimensional Hausdorff measure, whose projection is nonnegligible in a set of directions which is not Aronszajn null.

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