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*Multiparameter Landscapes*

The persistence landscape was introduced by Bubenik as an alternative to the barcode or persistence diagram. Although it encodes the same information, it has particularly nice properties. Vipond then defined a multiparameter generalization of persistence landscape which encodes the same data as the rank invariant. We generalize Vipond's construction to a multiparameter persistence landscape that has the same good properties, but has more flexibility in the data it encodes. Namely, for any fixed path connected shape in  $\mathbb{R}^m$ , we produce a persistence landscape associated to a given persistence module  $M$  that encodes the restriction of  $M$  to all regions similar to that shape. This is joint work with Ryan Kinser.