



Institut für Geometrie

## Gastvortrag

26.09.2019, 14:00

## Seminarraum 2 Geometrie

## **Decomposition of Persistence Modules**

## Magnus Botnan

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In this talk I will sketch an elementary proof of the fact that any pointwise finitedimensional persistence module over a small category decomposes into a direct sum of indecomposables with local endomorphism rings. This result will then be applied to give a short proof of the well-known fact that a pointwise finite-dimensional persistence module over a totally ordered set is interval decomposable. A similar structure theorem for middle exact persistence module over a product of totally ordered sets will also be discussed. This is joint work with W. Crawley-Boevey.

Michael Kerber