

# Filtrations of Profinite groups and Cohomological Operations

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## ABSTRACT:

Massey products in Galois cohomology became in recent years an important tool in the understanding of canonical Galois groups. They also shed new light on classical facts in the theory of algebras.

We show that Massey products are just one example of a spectrum of cohomological operations, that arise from natural filtrations of profinite groups.

In the case of free profinite groups, we use tools from the combinatorics of words to interpret these operations in terms of shuffle algebras.