

## Mathematics &gt; Representation Theory

# From Jantzen to Andersen Filtration via Tilting Equivalence

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The space of homomorphisms from a projective object to a Verma module in category  $\mathcal{O}$  inherits an induced filtration from the Jantzen filtration on the Verma module. On the other hand there is the Andersen filtration on the space of homomorphisms from a Verma module to a tilting module as described in [Soe07]. The tilting equivalence from [Soe98] induces an isomorphism of these kinds of Hom-spaces. We will show that this equivalence even identifies both filtrations.

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