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## Numerical tests on renormalised non-linear galaxy bias

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To extract cosmological information from large-scale galaxy clustering, we need accurate modeling of the relationship between dark matter and galaxies (galaxy bias). Recently, field-theory techniques have been used to provide a new description of galaxy biasing in terms of renormalised operators and counter terms, i.e. to build quantities that are not UV sensitive. We test these definitions of the leading-order non-linear bias coefficients (quadratic and tidal bias) against a set of numerical simulations. As a byproduct of our analysis we also discuss the accuracy of the kernels of standard perturbation theory.

**Primary authors:** WERNER, Kim (Argelander Institut, University of Bonn); Prof. PORCIANI, Cristiano (Argelander-Institut für Astronomie, University of Bonn)

**Presenter:** WERNER, Kim (Argelander Institut, University of Bonn)

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