

**GRÖBNER-SHIRSHOV BASES FOR THE NON-SYMMETRIC
OPERADS OF DENDRIFORM ALGEBRAS AND
QUADRI-ALGEBRAS**

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We show how to construct quadratic Grbner-Shirshov bases for the free dendri-
form algebra and quadrialgebra, which implies the koszulness of these structures.
We use the theory of operads and their representation as tree monomials.

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