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**Sara Madariaga\*** ([madariaga@math.usask.ca](mailto:madariaga@math.usask.ca)). *Gröbner-Shirshov bases for the non-symmetric operads of dendriform algebras and quadri-algebras.*

We show how to construct quadratic Gröbner-Shirshov bases for the free dendriform algebra and quadrialgebra, which implies the Koszulness of these structures. We use the theory of operads and their representation as tree monomials. (Received August 20, 2013)