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*Symmetries of Rational Functions Arising in Ecalle's Study of Multiple Zeta Values.*

In Ecalle's theory of multiple zeta values he makes frequent use of certain properties that express symmetries of rational functions in several variables. We focus on the properties of push-invariance, circ-neutrality, and alternality. Ecalle states and uses several implications about the relations between these symmetries. In this talk we will introduce these concepts and prove two results: first, that push-invariance and circ-neutrality imply the first alternality relation, but not the more general alternality relations, and second, that alternality does, indeed, imply circ-neutrality. (Received September 16, 2016)