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**Flavia Stan\*** ([fstan@risc.jku.at](mailto:fstan@risc.jku.at)). *Computing recurrences for Mellin-Barnes integrals.*

We present how Wilf-Zeilberger summation methods can be used to determine homogeneous and inhomogeneous recurrences for multiple Mellin-Barnes integrals where in analogy to the summation case, the integrands need to be hypergeometric in all integration variables and contain free hypergeometric parameters.

These complex contour integrals can also be viewed as sums of residues at certain poles of the integrands and they are connected to the inversion formula for the Mellin transform. Our algorithmic approach for computing the difference equations they satisfy, eliminates the need to search for sum representations and has several interesting applications. (Received September 17, 2010)