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Flavia Stan* (fstan@risc.uni-linz.ac.at), RISC, Johannes Kepler University, Altenbergerstr 69, 4040 Linz, Austria. *Algorithmic Proofs for Special Function Identities.*

We use computer algebra algorithms, mainly based on WZ-summation methods and on refinements by K. Wegschaider, to prove identities involving hypergeometric multi-series. These techniques have found new applications, for instance in various theoretical physics problems. (Received September 16, 2008)