

Abstract Submitted
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All order epsilon-expansion of Gauss hypergeometric functions with integer and half-integer values of parameters¹ SCOTT A. YOST, Baylor University, MIKHAIL KALMYKOV, Baylor University, Joint Institute for Nuclear Research, B.F.L. WARD, Baylor University — We discuss a proof that the Laurent expansions of certain classes of Gauss hypergeometric functions are expressible in terms of the harmonic polylogarithms of Remiddi and Vermaseren with polynomial coefficients. An efficient algorithm for the calculation of the higher-order coefficients of Laurent expansion is constructed. Some particular cases of Gauss hypergeometric functions are also discussed.

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