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Dan Volok* (danvolok@math.ksu.edu), 138 Cardwell Hall, Kansas State University, Manhattan, KS 66506. *Rational discrete analytic functions.*

One of the peculiarities of discrete complex analysis is that the usual point-wise product of two discrete analytic functions is not discrete analytic, in general. For example, on the integer lattice in the complex plane the functions z and z^2 are discrete analytic, but the function z^3 is not. We shall discuss a suitable product of Cauchy-Kovalevskaya type, which preserves the discrete analyticity, and the structure of discrete analytic functions, which are rational with respect to this product.

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