

POLYNOMIAL FUNCTIONS AND SEQUENTIAL PRODUCTS

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Abstract: Polynomial functions from \mathbb{N} to \mathbb{Z} are familiar to everyone. Is there a similar notion in a noncommutative setting, that is, for functions from a free monoid A^* to a free group $F(B)$? The aim of this lecture is to answer this question positively in two different ways. First, by using differential operators and next by using a new operation, the sequential product of functions.