

NUMBER THEORY SEMINAR

Finite generating functions for the sum of digits sequence

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ABSTRACT:

I will show some results about finite generating functions associated with the sequence $\{s_b(n)\}$, where $s_b(n)$ is the sum of the digits of the representation in base b of the integer n . This sequence was extensively studied by J.P. Allouche and J. Shallit - see for example their book "Automatic Sequences, Theory, Applications, Generalizations".

Our generalizations include some Lambert series and infinite products related to the sequence $\{s_b(n)\}$. This is joint work with T. Wakhare.

Any questions, please e-mail: rnoble@mathstat.dal.ca.