Wiman-Valiron theory for the Wilson operator

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In this talk, we first introduce a series expansion of entire functions in a polynomial basis based on the Wilson operator. We then analyze how the terms of this series expansion affects the local behavior of the entire function. In particular, we show that the local behavior is largely contributed by those terms near the term with the maximum modulus. These results will be helpful for estimating the growth of entire solutions to Wilson difference equations.