On the Asymptotics of a Lower Bound for the Diaphony of Generalized van der Corput Sequences in Arbitrary Base b

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In a recent paper we were able to construct a lower bound for the diaphony of any generalized van der Corput sequence in arbitrary base b. In this talk we will consider the asymptotics of our lower bounds using methods established by Faure. We will discuss our results and compare them with general bounds for the diaphony as well as with the smallest values of the diaphony of generalized van der Corput sequences that are currently known.