On uniformly distributed $[0, 1)$ sequences and binary sequences constructed by discrete logarithms

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Abstract. Cobeli studied the uniform distribution of points constructed by discrete logarithms. Gibson and Shparlinski established multidimensional equidistribution results for tuples of scaled discrete logarithms. In this paper, we extend the points introduced by Shparlinski to the form of polynomials, and show the equidistribution of these points. Furthermore, we give a large family of pseudorandom binary sequences using discrete logarithms.

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