CONSTRUCTIONS OF DIGITAL NETS USING GLOBAL FUNCTION FIELDS

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1. Introduction

The theory of \((t, m, s)\)-nets and \((t, s)\)-sequences provides powerful tools for the construction of low-discrepancy point sets, respectively low-discrepancy sequences, in multidimensional unit cubes. We refer to the monograph [5, Chapter 4] and the recent survey article [6] for general background on this theory. We follow the usual convention in the area that a point set is a multiset in the sense of combinatorics, i.e., that multiplicity of elements is allowed and taken into account.