Title: On the correlation of pseudorandom binary sequences with composite moduli

Author(s): Huaning Liu, Tao Zhan and Xiaoyun Wang

Recently J. Rivat and A. Sárközy extended two large families of pseudorandom binary sequences to the case of composite moduli m, where m is the product of two different primes not far apart. In this paper we study the correlation measure of these sequences. Our results show that these sequences are "bad" if either m is "not large" or m is "large" but its prime factors are known.

Address:
Huaning Liu
School of Mathematics and System Sciences
Shandong University
Jinan, Shandong
P. R. China
Department of Mathematics
Northwest University
Xi'an, Shaanxi
P. R. China

Address:
Tao Zhan
School of Mathematics and System Sciences
Shandong University
Jinan, Shandong
P. R. China

Address:
Xiaoyun Wang
School of Mathematics and System Sciences
Shandong University
Jinan, Shandong
P. R. China