

On Vilenkin-like systems

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Let $m := (m_k, k \in \mathbf{N})$ be a sequence of integers each of them not less than 2. Let G_{m_k} be a set (without any operation), where the number of the elements is m_k . Let G_m be (the so called Vilenkin-like space, see e.g. [1,2,3]) the Cartesian product of the sets G_{m_k} .

We can define an orthonormal system on G_m . This system is a generalization of several well-known systems. We mention e.g. the Walsh, Vilenkin system, and the character system of the p -adic integers. In my talk I would like to talk about examples, results and questions.

References

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