Constructions of linear codes from cryptographic functions

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Linear codes have a wide range of applications in the data storage systems, communication systems, consumer electronics products and etc. since their algebraic structure can be analyzed and they are easy to implement in hardware. How to construct linear codes with excellent properties to meet the demands of practical systems becomes a research topic, and it is an efficient way to construct linear codes from nonlinear cryptographic functions. In this talk, we will introduce some methods to construct linear codes by using cryptographic functions (not a complete survey) and present some research problems in this area.