## **Abstract**

Bent partitions are quite powerful in constructing p-ary bent functions, vectorial bent functions and generalized bent functions. Moreover, bent partitions are closely connected with many objects from combinatorics, such as partial difference sets (PDSs), association schemes, and Latin square partial difference set packings (LP-packings). In this talk, we give a comprehensive introduction of bent partitions in terms of their characterizations, constructions and applications.