1005-05-93   **Tim L Alderson*** (`talderso@unb.ca`), University of New Brunswick, Saint John, 100 Tucker Park Road, PO Box 5050, Saint John, NB E2L 4L5, Canada. *MDS Codes, Combinatorics and the Embedding Problem.*

Maximum distance separable codes serve as an archetype of the interplay between designs, codes, and geometry. Linear MDS codes are those meeting the singleton bound making them interesting objects in and of themselves. Such codes are also equivalent to arcs in projective spaces. As combinatorial objects, general (not necessarily linear) 2 dimensional MDS codes are equivalent to (Bruck) nets and hence sets of mutually orthogonal Latin squares. Higher dimensional general MDS codes can be viewed as certain sets of mutually orthogonal Latin hypercubes. In this talk we introduce the so called embedding problem of these codes and discuss some recent related results. (Received February 01, 2005)