

## Association schemes related to Hadamard matrices

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Hadamard matrices have been widely studied from the view point of design theory, coding theory, quantum information theory. Algebraic combinatorics also contributes the study for Hadamard matrices. For example, it was shown that Hadamard matrices have a structure of a distance regular graph of diameter 4. In this talk we pursue the study of Hadamard matrices along this line and show that some association schemes are obtained from Hadamard matrices with some mutually orthogonal Latin squares. This is joint work with Hadi Kharaghani.