

1030-05-191

Sylvia A. Hobart* (sahobart@uwyo.edu), Sylvia A. Hobart, Department of Mathematics,
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Coherent configurations are a generalization of association schemes, and provide a framework for investigating certain combinatorial objects. Given a subset of a coherent configuration, we define a distribution matrix for it and show that this matrix is positive semidefinite. This is a generalization of Delsarte's results. We also give an application to partial geometries. (Received August 02, 2007)