

1136-00-307

James P. Solazzo* (jsolazzo@coastal.edu), Coastal Carolina University, P.O. Box 261954, Conway, SC 29528, and **Thomas R. Hoffman.** *Complex Two-Graphs.*

In ‘A survey of two-graphs’ , J.J. Seidel lays out the connections between simple graphs, two-graphs, equiangular lines in \mathbb{R}^k and strongly regular graphs. It is well known that there is a one-to-one correspondence between two-graphs and sets of equiangular lines in \mathbb{R}^k . In this talk we will present a generalization of two-graphs by allowing the entries of the Seidel matrix to be roots of unity beyond ± 1 . Many of the results regarding *real* two-graphs have a natural generalization in the complex setting including equiangular lines in \mathbb{C}^k . (Received January 19, 2018)