

Meeting: 1005, Newark, Delaware, SS 5A, Special Session on Designs, Codes, and Geometries

1005-05-132 **Chris Godsil*** (cgodsil@uwaterloo.ca), Combinatorics & Optimization, University of Waterloo, Waterloo, ON N2L 3G1, Canada. *Complex lines, difference sets and distance-regular graphs*. Preliminary report.

Some problems in quantum computing require certain special sets of lines in complex space. I will discuss two cases where these sets can be constructed using distance-regular graphs and/or difference sets. (Received February 04, 2005)