DISTANCE GRAPHS ON CONSTANT WEIGHT METRIC SPACES WITH ROSENBLOOM-TSFASMAN METRIC

W.B. Vasantha Kandasamy and R.Rajkumar

In this paper we study the Rosenbloom and Tsfasman and introduce the distance graphs of constant weight subspaces of the spaces $\mathbb{Z}_q^n$ and $S_n$ with RT metric. This paper has five sections. Section one is introductory in nature. Section two gives the notations and preliminaries used in this paper. In section three we study the distance graphs on $C(n, q, w)$ with RT metric and prove some related results. The distance graphs on $C(n, w)$ with RT metric is analysed in section four. The final section gives the conclusions based on our study viz. distance graphs can be expressed as union and join of complete multipartite graphs.