

Generalizing the Linear Programming Bound

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Abstract—We give a generalization of the Fourier analytic proof of the binary Linear Programming bound due to Navon and Samorodnitsky to more general channels - the q -ary Hamming metric and the Lee metric, for codes that are closed under inverses. We also derive a numerical bound on the size of the Lee ball of a given radius.

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IV. CONCLUSION

We conclude by pointing out that on the last page the columns need to be balanced. Instructions for that purpose are given in the source file.

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