LOCALIZED RANDOM AND ARBITRARY ERRORS IN THE LIGHT OF AV CHANNEL THEORY

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Abstract

We introduce probabilistic communication models with localized errors and determine the optimal rates of codes, if a priori error patterns or actual errors or both occur at random according to uniform distributions. There are strong connections to the theory of AV channels.

Key words: Localized errors, arbitrary and random errors, capacities, compression lemmas, elemination and robustification techniques, arbitrary varying channels with and without side information at sender.