



The Trivial Notions Seminar
Proudly Announces

Information Theory and the Channel Coding Theorem

A talk by
Benjamin Stetler

Abstract

Information theory is the quantitative study of the transmission, encoding, and recovery of information. One of the foundational results in the area is the *channel coding theorem*, first stated by Claude Shannon in his landmark 1948 paper. The theorem states that for any communication channel with a possibility of transmission error, there is a quantity known as the *channel capacity* that satisfies the following property: at any rate below the channel capacity, information can be transmitted with an arbitrarily low probability of error. We'll discuss the theorem and its converse, providing a brief tour of some of the fundamental concepts of information and coding theory.

Thursday October 18th, at 1:30 pm
Science Center 507