SUMO Symposium

Tuesday, October 23th

5:00-6:00pm, room 380Y

(Snacks Provided)

The Capacity of the Deletion Channel

Marc Rasi

ABSTRACT:

A deletion channel takes a string of bits in at one end and spits them out at the other end, after deleting some of them with probability d. Is it possible to send information at a positive rate through this channel with no errors? Surprisingly, the answer is (almost) yes. There is a positive rate R(d) at which you can send information with arbitrarily small probability epsilon>0 of error. R(d) does not depend on epsilon! But no one knows what R(d) is. In this talk, I will try to convince you that R(d) exists and then I will give some simple upper and lower bounds on R(d).

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