

Michigan Math Club

Thursday at 4pm in the Nesbitt Room

Free Pizza and Pop

Shared Secrets

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Abstract for 31 March 2016

I have a document purporting to be a clue to an important secret, but in fact it contains no information whatsoever about the secret. You have a different document, also purporting to be a clue about the same secret, but also not actually containing any information about the secret. Yet, when we read both documents, we can determine the secret completely. I'll describe how such a " $0+0=1$ " phenomenon is possible, and then I'll discuss generalizations --- for example, ten documents, such that no six of them, even combined, contain any information about the secret, but any seven of them let you determine the secret.

