

Topic	Short description of problem	Topic Facilitator	Email	Room
Information Contagion	Information Contagion theory investigates how leak of secret/false information can effect the economy and other social aspects. The spread of propaganda has a social impact. For example twitter hoaxes that make false reports celebrity deaths or claims of financial crisis that cause stock market to plunge.	Temitope Toriola	ttoriola@purdue.edu	CL50 - 121
Capacity of the general discrete one-way relay	<p>The problem, first posed by Van Der Mullen in 1971, is one of the longest outstanding open problems in information theory. The problem revolves around communication between two parties, Alice and Bob, where a third, Romeo, assists by relaying information.</p> <p>In the general discrete model the received signal by Bob is a probabilistic function of the transmitted symbols by Alice and Romeo.</p>	Eric Graves	ericsgroves@gmail.com	CL50 - 125
Error exponent of Gaussian channel with delayed Gaussian feedback	The error exponent of the Gaussian channel with Gaussian feedback has been lower bounded (Chawla, 2006). The error exponent of a DMC with delayed feedback has been upper bounded (Palaiyanur and Sahai, 2010). If we can extend the latter work to the Gaussian case, and then take the zero delay limit, we can obtain an upper bound to the former scenario. This will then define an error exponent region for the Gaussian channel with Gaussian feedback.	Aman Chawla	amanchawla@mail.usf.edu	CL50 - 129