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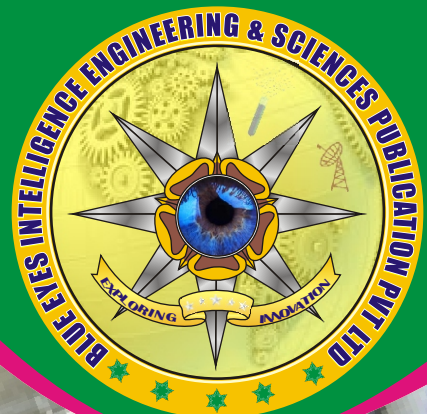
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1.	<b>Authors:</b>	Allanki Sanyasi Rao, S. Srinivas	
	<b>Paper Title:</b>	A New BER and SNR Calculations for MIMO	
	<p><b>Abstract:</b> Multiple Antenna Communication has become one of the major focuses in wireless communication research. MIMO Technology is used to enhance the system capacity. The effect of Fading and Interference can be combated to increase the capacity of a link. MIMO system uses Multiple Transmit and Multiple Receive antennas which exploit the multipath propagation in rich scattering environment. The matrix channel plays a pivotal role in the throughput of a MIMO link since the modulation, data rate, power allocation and antenna weights are dependent on the channel gain. Alternative in order to reduce the complexity of MIMO system, detection techniques are proposed but the complexity of algorithmic schemes are in higher than that of equalizer based techniques such as Zero Forcing (ZF), Minimum mean square Error Methods (MMSE) and Maximal Ratio Combining (MRC). In this paper BER analysis is presented using different equalizers and then optimum equalization method is suggested.</p> <p><b>Keywords:</b> Minimum mean square Error Methods (MMSE), Multiple Input Multiple Output Systems (MIMO), Rayleigh Channels, Bit Error Rate (BER), Zero Forcing (ZF), Maximal Ratio Combining (MRC), Successive Interference Cancellation (SIC), Binary Phase Shift Keying (BPSK), Fast Fading, Adaptive Equalization.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. S.Nagarani, C.V.Seshiah, 2011. "An Efficient Space-Time Coding for Wireless Communication". European Journal of Scientific Research Vol.52 No.2 pp.195-203.</li> <li>2. V. Tarokh, A. Naguib and et al. 1999 "Space-time codes for high data rate Wireless communication: performance criteria in the presence of channel estimation errors, mobility, and Multiple paths," IEEE Transactions on Communications, vol. 47, no. 2, pp. 199-207.</li> <li>3. S. M. Alamouti, 1998 "A simple transmit diversity technique for wireless communications," IEEE Journal on Selected Areas in Communications, vol. 16, no. 8, pp. 1451-1458.</li> <li>4. H. Zhang, H. Dai, Q. Zhou, and B. L. Hughes, 2006 On the diversity-multiplexing tradeo for ordered SIC receivers over MIMO channels," IEEE International Conference on Communications (ICC), Istanbul, Turkey.</li> <li>5. S. Haykin, K. Huber, and Z. Chen, "Bayesian Sequential State Estimation for MIMO Wireless Communications," IEEE. Proceedings, Vol. 92. No. 3, pp. 439-454, Mar. 2004</li> <li>6. Approximate Minimum BER Power Allocation for MIMO Spatial Multiplexing Systems Neng Wang and Steven D. Blostein, Senior Member, IEEE.</li> </ol>		1-4