## **Metropolis Hastings** Lag-k autocorrelation plot - X1 Sampling trace plot - X1 Correlation 1.00 0.75 0.50 0.25 0.00 500 25 250 750 50 75 1000 100 Index Lag Sampling trace plot – X2 Lag-k autocorrelation plot - X2 Correlation 1.00 0.75 0.50 0.25 0.00 -60250 500 750 1000 25 50 75 100 Index Lag **Hamiltonian Monte Carlo** Sampling trace plot - X1 Lag-k autocorrelation plot - X1 Correlation 1.00 0.75 0.50 0.25 0.00 -20 500 75 250 750 1000 25 50 100 Index Lag Lag-k autocorrelation plot - X2 Sampling trace plot – X2 Correlation 1.00 0.75 0.50 0.25 0.00 250 500 750 1000 25 50 75 100 Index Lag Rejection sampling Sampling trace plot - X1 Lag-k autocorrelation plot - X1 Correlation 1.00 0.75 0.50 0.25 0.00 500 750 25 50 75 250 1000 100 Index Lag Sampling trace plot – X2 Lag-k autocorrelation plot - X2 Correlation 1.00 0.75 0.50 0.25 0.00 0 250 500 750 1000 25 50 75 100 Index Lag Chain