## **Metropolis Hastings** Sampling trace plot - X1 Lag-k autocorrelation plot - X1 Correlation 1.00 0.75 0.50 0.00 0.00 0.5 0.0 250 500 750 1000 25 75 50 100 Index Lag Sampling trace plot - X2 Lag-k autocorrelation plot - X2 1.00 0.75 0.50 0.25 Correlation 0.25 0.00 250 500 750 1000 50 75 100 Index Lag **Hamiltonian Monte Carlo** Sampling trace plot - X1 Lag-k autocorrelation plot - X1 Correlation 0.5 0.0 -0.5250 500 750 1000 25 50 75 100 0 Index Lag Sampling trace plot - X2 Lag-k autocorrelation plot - X2 Correlation 0.5 0.0 -1.5 -0.5-2.00 250 500 750 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 0.00 250 500 750 1000 25 50 75 100 Index Lag Sampling trace plot – X2 Lag-k autocorrelation plot - X2 Correlation 1.00 0.75 0.50 0.25 0.00 250 500 750 1000 25 50 75 100 Index Lag Chain