TS Module 11: simulated and actual time series HW

(The attached PDF file has better formatting)

Homework assignment: Partial autocorrelations

[Partial autocorrelations are covered in Module 10, along with sample autocorrelations.]

- A stationary ARMA process has $\rho_2 = 0.20$.
- ρ_1 ranges from 0.2 to 0.7 in units of 0.1.

A. Graph the partial autocorrelation of lag 2 (ϕ_{22}) as a function of ρ_1.
B. Explain why the partial autocorrelation is positive for low ρ_1 and negative for high ρ_1.