

# Computational and Applied Mathematics Seminar

**Dr. Ronald Haynes,  
Memorial University**

**Wednesday, March 21, 2012  
10:00a.m., HH-3017**

*Computing Matrix Inverses - another look*

**Abstract:**

It is well known that one should avoid the computation of matrix inverses if at all possible. But if you really must how should you proceed? In this short talk, I will show that the much maligned Gauss-Jordan algorithm has some distinct advantages over the more often recommended matrix factorization and multiple triangular solve routine. In fact one has to work really hard to design an algorithm based on matrix factorizations which is competitive with the Gauss-Jordan approach. This talk should be understandable by undergraduate and graduate students and maybe teach those with more experience something new (I certainly did!).