

Department of Mathematics and Statistics
Colloquium Lecture Series

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**Control Theoretic Approach to Sampling and
Approximation Problems**

We present applications of some methods of control theory to problems of signal processing and optimal quadrature problems.

The following problems are considered:

1. Construction of sampling and interpolating sequences for multi-band signals.
2. Spectral estimation of signals modeled by a finite sum of exponentials modulated by polynomials.
3. Construction of optimal quadrature formulae for integrands determined by solutions of an initial boundary value problem.

Thursday, November 29, 2007

Chapman 104

1:10-2:00

Refreshments after the talk in Chapman 101A