

Curriculum for MEK4600

Taylor, J.R. An Introduction to Error Analysis: The Study of Uncertainties in Physical Measurements 1982 University Science Books

Chapter 2, pages 13-35 – How to report and use uncertainties

Chapter 3, pages 45-79 – Propagation of uncertainties

Chapter 4, pages 93-119 – Statistical analysis of random uncertainties

Chapter 6, pages 165-170 – Rejection of data

Bendat, J.S. & Piersol, A.G. Random Data: Analysis and Measurement Procedures 3rd Edition 2000 Wiley

Chapter 5.1-5.2, pages 118-154 – Stationary random processes: basic concepts & spectral density functions

Chapter 8, pages 272-315 – Statistical errors in basic estimates

Chapter 10, pages 349-393 – Data acquisition and processing

Chapter 11.1, pages 394-400 – Data analysis: data preparation

Chapter 11.4-11.5, pages 417-442 – Data analysis: autocorrelation functions & autospectral density functions

Papers

1. Sveen, J. K. & Cowen, E. A. 2004 Quantitative imaging techniques and their application to wavy ow. In PIV and Water Waves (ed. J. Grue, P. L. F. Liu & G. K. Pedersen). World Scientific
- 2.