

# Lecture 9 — System Analysis

Michael Brodskiy

Professor: I. Salama

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- The Discrete Fourier Transform

$$X(e^{j\Omega}) = \sum_{k=\langle N_o \rangle} a_k e^{jk \frac{2\pi}{N_o} n}$$

- Convergence of the Discrete Time Fourier Transform

$$\sum_{n=-\infty}^{\infty} |x[n]| < \infty$$