

## Chapter 11.05

### Informal Development of Fast Fourier Transform (FFT)

#### OBJECTIVES

1. helping students to understand the derivation of the most basic case of FFT (with  $N = 2^r$  sample data points, where  $r = 2, 3, \text{ or } 4$ )
2. helping students to understand why FFT is much more computationally advantageous as compared to DFT
3. helping students to understand the “unscrambling” process of FFT
4. understanding with sufficient details on how to implement FFT algorithms on modern computers in any language