Nguyet N Nguyen*, 1 University Plaza, Youngstown, OH 44555, and Isaac Adjetey. Modeling and Pricing Weather Derivatives. Preliminary report.

Weather derivatives are financial instruments that corporations, especially energy and utility companies, use to hedge against risks due to adverse and unpredictable weather. In this talk, we will introduce the financial tools and some models for pricing the weather derivatives whose underlying asset depends on the heading or cooling temperatures. We then implement a model to predict the average temperatures and use the predicted underlying asset to estimate the prices of a corresponding weather option. (Received September 25, 2018)