

Thursday, February 11, 2016
4:30–5:20 p.m.
SAS 2102

Financial Mathematics Applications and Career Paths

Jeff Scroggs

This presentation focuses on two projects, (1) the creation and back-testing of a **regional index**, and (2) pricing mortgaged backed securities (MBS) and collateralized mortgage obligations (CMOs). These projects were completed by two groups during the summer of 2015. The presentation of these topics will be computationally focused (as compared to theory). The projects will be followed by a discussion of the field and potential career paths.

Financial Mathematics (Quantitative Finance) is the cross-disciplinary field merging the disciplines of Finance, Mathematics, Statistics and Computer Science. The field involves modeling inherent uncertainty associated with financial markets. For instance: What will **interest rates** be next week, next month, next year? What is that the best approach for next years expected **return and volatility**? Is holding a portfolio of 10 equities of equal weight better than holding a portfolio of 10 equities of unequal weights? This uncertainty manifests itself through the unpredictability attributed to certain actions by governments, corporations, individuals, and a host of other drivers within the economy. This talk will be **accessible to all undergraduates**.

NCSU Society for Undergraduate Mathematics

SUM Series

Mathematics and pizza!