

FRANKLIN & MARSHALL COLLEGE  
and  
MILLERSVILLE UNIVERSITY

**A *Virtual* Joint Colloquium in Mathematics**

Thursday, February 25, 2021, 4:00–5:00pm EDT

**Dr. Robert Buchanan, Millersville University**

**From Binomial Random Variables to the Black-Scholes Formula**

**Abstract:** Myron S. Scholes and Robert C. Merton won the 1997 Nobel Prize in Economics for their development with Fisher Black of the Black-Scholes formula for option pricing. Starting with the notion of a binomial random variable, using the multivariable form of Taylor's theorem, and the principle of no arbitrage we will outline the development of the Black-Scholes formula. This formula is of fundamental importance in financial markets and part of the syllabus for the Society of Actuaries' Investment and Financial Markets examination.

Please contact one of the individuals below for the Zoom link to this event.

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