

GRADUATE SEMINAR

Yazid Al-Hassan

Algebraic Riccati equations

PhD Student supervised by Chun-Hua Guo

Monday, December 4th, 2017

3:30 – 4:30 pm

CW 307.20 (Math Lounge)

Abstract

Several types of algebraic equations are encountered in many fields of applied mathematics, engineering and economics. Among them, we consider what are known as *algebraic Riccati equations*. Algebraic Riccati equations are involved in many applications, such as optimal control problems, Total Least Squares (TLS) problems, open-loop Nash games and many more. In this talk, we review different classes of Algebraic Riccati equations, properties of their solutions and the computational methods that proposed to solve them.