



Department of Mathematics and Statistics

COLLOQUIUM

Tuesday, March 21st, 2017

4:00 – 5:00 pm, Adel Mathematics Bldg., Room 164
(refreshments at 3:45)

Dr. Shafiu Jibrin

NAU

Finding an Interior Point of a Spectrahedron Using Infeasible Newton's Method

Abstract: We present Infeasible Newton's method for finding an interior point of a spectrahedron defined by a system of linear matrix inequalities. The method is based on Infeasible Newton's method for finding analytic center for linear matrix inequalities. It moves to an interior point, starting from any point. We use numerical experiments to compare the method with the method of alternating projections. The results show that our method takes less number of iterations and less time than the method of alternating projections in finding an interior point.

Algebra Combinatorics Geometry and Topology (ACGT) Seminar meets every Tuesday, 12:45 – 1:45 pm, AMB 146.

Applied Math Seminar (AMS) meets every Thursday, 12:45 – 1:45 pm, AMB 146.

Friday Afternoon Undergraduate Mathematics Seminar (FAMUS) meets Fridays, 3pm, AMB 164.