

**Meeting:** 1000, Albuquerque, New Mexico, AMS CP 1, Session for Contributed Papers

1000-90-61            **Shafiu Jibrin\*** (Shafiu.Jibrin@nau.edu), Flagstaff, AZ 86011, **James Swift**, Flagstaff, AZ 86011, and **Daniel Stover**, Flagstaff, AZ 86011. *Eliminating Redundant Linear Constraints in Semidefinite Programming*. Preliminary report.

Semidefinite programming has been an active area of research since the last decade. It has diverse applications, including engineering, statistics and computational geometry. However, algorithms for solving semidefinite programming problems are restricted to problems of moderate size because the computation time for solving a semidefinite programming problem grows faster than linear in the number of constraints. So, it is of interest to consider how to remove redundant constraints. However, it has been shown that the problem of deterministically eliminating redundant constraints in semidefinite programming is NP complete, in general.

In this talk, we give deterministic methods for eliminating all redundant *linear* constraints in semidefinite programming.  
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