

**SEMINARIO
OPTIMIZACION Y EQUILIBRIO**

**EXPOSITOR
Dr. Walter Gomez
Universidad La Frontera, Chile**

**TITULO
"Sufficient optimality conditions hold for almost all nonlinear semidefinite programs"**

Abstract:

We derive a new genericity result for nonlinear semidefinite programming (NLSDP). Namely, almost all linear perturbations of a given NLSDP are shown to be nondegenerate. Here, nondegeneracy for NLSDP refers to the transversality constraint qualification, strict complementarity and second-order sufficient condition. A reduced NLSDP is locally considered by transforming equivalently the semidefinite constraint to a smaller dimension via Schur complement.

While deriving optimality conditions for the reduced NLSDP, the $\$H\$$ -term" in the second-order sufficient condition vanishes. This allows us to access the proof of the genericity result for NLSDP.

Miércoles 27 de Julio a las 16:30 hrs, Sala de Seminarios John Von Neumann CMM.

