



Próximo Seminario DMAT

Jueves 21 de Marzo de 2019, 11:30 - 12:30

Sala de Seminarios, DEPARTAMENTO DE MATEMÁTICA

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Chance-constrained Optimization: Algorithms, Approximations and Applications

Chance constraints are a crucial tool of stochastic optimization to develop mathematical optimization models; they form the backbone of many important national security data science applications. These include critical infrastructure resiliency, cyber security, power system operations, and disaster relief management. In this talk, we (i) develop new algorithms to approximate chance-constrained optimization models using classical probability theory, and (ii) demonstrate the application of chance-constraints to a stochastic unit commitment problem. I will also present related work to stochastic optimization in the fields of public health and renewable energy.