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**Baasansuren Jadamba, Akhtar Khan and Miguel Sama\*** (msama@ind.uned.es), Calle Juan del Rosal, 12, ETSI Industriales, Madrid, Madrid 28040. *Error estimates for conical regularization of abstract optimization problems.*

In this talk, we deal with an abstract constrained optimization problem in Banach spaces. In this context, by conical regularization we understand those methods which construct a family of approximate problems by replacing the constraint cone by an approximate family of cones. This method is worthwhile in order to get optimality conditions by means of multiplier rules. Recently, we have introduced some variants of these methods by using different families of cones. In particular, in [B. Jadamba, A.A. Khan, M. Sama . (2012). *Regularization for state constrained optimal control problems by half spaces based decoupling.* Systems Control Lett. 61, 707-713] by using a decoupling of the constraint cone into halfspaces and in [A.A. Khan, M. Sama (2013). *A new conical regularization for some optimization and optimal control problems: Convergence analysis and finite element discretization.* Numer. Funct. Anal. Optim. 34, no. 8, 861-895] by using a family of associated Henig dilating cones. In this occasion, our aim is to measure the distance in norm of the regularized solution to the solution of the original problem by means of a general scheme. And to apply this scheme in order to get numerical error estimates for PDE optimal control problems, (Received September 16, 2013)