Nesterov scheme for convex minimization, under growth-flatness conditions

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Growth (or Lojasiewicz) condition is playing an important role on convex minimization problems. In particular, Gradient-Descent type of algorithms (or Forward-Backward in the non-smooth case) are well adapted on this kind of condition and enjoy several convergence properties. In this talk we present how we can combine Growth condition and a flatness-type condition on the geometry of the minimizing function, in order to study the convergence properties of an inertial version of Gradient-Descent algorithm (la Nesterov) and to obtain some new convergence rates. This work consists a discrete counterpart of the one made in the continuous case in [3].

Références

