

## NEW REGULARITY CONDITIONS FOR LAGRANGE AND FENCHEL–LAGRANGE DUALITY IN INFINITE DIMENSIONAL SPACES

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*Abstract.* We give new regularity conditions expressed via epigraphs that assure strong duality between a given primal convex optimization problem and its Lagrange and Fenchel-Lagrange dual problems, respectively, in infinite dimensional spaces. Moreover we completely characterize through equivalent statements the so-called stable strong duality between the initial problem and the mentioned duals

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