Title. Equivalence between cost minimization problems for jump-diffusions and their linear programming formulation

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Abstract. We formulate stochastic optimal control problems for cost minimization of jumpdiffusions of Ito-Levy type as linear programming (LP) problems for occupation measures, and prove that the optimal values of both problems coincide. The main tool of this approach is the dual formulation of the primal linear program, which is strongly connected to the notion of subsolution of the HJB equation associated with the cost minimization problem, and a maximum principle for semicontinuous functions applicable to partial integro-differential equations.