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Jangwoon Lee* (11ee3@umw.edu), University of Mary Washington, and **Hyung-Chun Lee**, Ajou University. *Exponential convergence for stochastic optimal control problems.*

We analyze the hxp version of the finite element method for optimal control problems constrained by elliptic partial differential equations with random inputs. The main result is that the hxp error bound for the control problems subject to stochastic partial differential equations leads to an exponential rate of convergence with respect to p as for the corresponding direct problems. Numerical examples are used to confirm the theoretical results. (Received August 27, 2015)