

# STOCHASTIC OPTIMIZATION AND CONVEX DUALITY

ARI-PEKKA PERKKIÖ

## ABSTRACT

We propose a general duality framework for minimizing a convex integral functional over a space of adapted stochastic processes. We indicate that many optimization problems in operations research and mathematical finance can be written in this framework. In this talk we scratch this subject by focusing on the theory of normal integrands and integral functionals.

SCHOOL OF SCIENCE AND TECHNOLOGY, AALTO UNIVERSITY  
*E-mail address:* aperkkio@math.hut.fi