



UNIVERSITA' DEGLI STUDI DI MILANO
FACOLTA' DI SCIENZE MATEMATICHE
FISICHE E NATURALI

GRADUATE SCHOOL IN MATHEMATICAL SCIENCES
PHD PROGRAM IN MATHEMATICS AND STATISTICS
FOR COMPUTATIONAL SCIENCES

On quasiconvex conditional maps
Duality results and applications to Finance

Marco MAGGIS

Ledizioni

Quasiconvex analysis has important applications in several optimization problems in science, economics and in finance, where convexity may be lost due to absence of global risk aversion, as for example in Prospect Theory [57].

Our interest in quasiconvex analysis was triggered by the recent paper [11] on quasiconvex risk measures, where the authors show that it is reasonable to weaken the convexity axiom in the theory of convex risk measures, introduced in [31] and [36]. This allows to maintain a good control of the risk, if one also replaces cash additivity by cash subadditivity [25].