

Approximation as Differentiation notes

1 OVERVIEW

Some notes on the key constructions:

- Categories of families, special case of Grothendieck construction

2 DEFINITIONS

2.1 Category of families

This is the Grothendieck construction for a functor $F : C \rightarrow \mathbf{Cat}$, in the special case where $F : C \rightarrow \mathbf{Set}$. (Where we read a \mathbf{Set} -valued functor as a \mathbf{Cat} -valued functor restricted to discrete categories.)

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Manuscript submitted to ACM

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