Classically typed λ-calculi
Master thesis

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Abstract. Intuitionistic natural deduction can be extended to a classical logical system by adding the law of Double Negation or Reductio Ad Absurdum or by allowing multiple conclusions in the sequents. The isomorphic λ-calculi are respectively λC, $\lambda \Delta$ and $\lambda \mu$. The $\bar{\lambda}\mu$- and the $\bar{\lambda}\mu\tilde{\mu}$-calculus are both isomorphic to classical sequent calculus. These classically typed λ-calculi contain operators that in some way provide control over the current context. The calculi can be compared on three aspects: the typing system, the notion of reduction and the operational semantics. For the systems $\lambda \mu$, $\bar{\lambda}\mu$ and $\bar{\lambda}\mu\tilde{\mu}$ translations have been found that preserve all these aspects. The $\lambda \Delta$-calculus is modified in such a way that such a translation can be found as well.