

# “Hyperintensional Proof Theory”

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## Abstract

In this talk, I’ll investigate how to develop “good” proof systems for hyperintensional logics. Odintsov and Wansing define a logic  $L$  to be hyperintensional iff at least one of its operators doesn’t respect  $L$ -equivalence. Hyperintensional logics arise in various places in philosophical logic, ranging from logics of metaphysical grounding to deontic logics of permission and obligation.

While it’s typically straightforward to obtain *some* sound and complete proof system for a given hyperintensional logic, these systems are typically not particularly informative. The question that we’ll be tackling is how to develop proof systems that allow us to gain more structural insight into the relevant philosophical concepts. It turns out that this is not an altogether straightforward task—but in this talk, I hope to make at least some progress by analyzing strategies that have worked for certain hyperintensional logics.