Analytic Calculi for Non-Classical Logics: Theory and Applications

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─── **Abstract** ───

The possession of a suitable proof-calculus is the starting point for many investigations into a logic, including decidability and complexity, computational interpretations and automated theorem proving. By suitable proof-calculus we mean a calculus whose proofs exhibit some notion of subformula property ('analyticity'). In this talk we describe a method for the algorithmic introduction of analytic sequent-style calculi for a wide range of non-classical logics starting from Hilbert systems. To demonstrate the widespread applicability of this method, we discuss how to use the introduced calculi for proving various results ranging from Curry-Howard isomorphism to new interpretative tools for Indology.

─── **References** ───

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