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Theory of Logical Consequence - past, present and future

(abstract)

The aim of the lecture is to give a general review of old and more recent results, as well as, possible future developments in the theory of logical consequence operation.

- I start from comparing three frameworks for logical investigations: Tarski's logical consequence operation, Gentzen's sequents and Hilbert-style proofs.
- In the second part I will give a review of results in the theory of logical consequence operation concerning logical matrices, algebraic semantics, implicative logics and equivalential logic.
- Last part concerns some generalizations of logical consequence and logical matrices. The former gives us an interesting and promising conceptual framework for non-monotonic logic. The later gives an general semantics for logic of rejection.