▶ MARIA DA PAZ N. MEDEIROS, *A reviewed syntactic proof of Gödel interpretation of intuitionist logic into S4.*

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In 1933 Gödel introduced an interpretation of Heyting's propositional calculus into a system equivalent to S4 modal logic, called Σ, and did the following conjecture: *a formula holds in Heyting's calculus if and if its translation is proved in Σ* [1]. Gödel's main aim was to give an interpretation of the propositional intuitionistic logic that was also significant from a non intuitionistic point of view.

In 1948, the first semantic proof of this conjecture is known, but only in 1968 a syntactic proof was outlined by Prawitz and Malmnäs in [3].

We will present one more syntactic proof to Gödel's conjecture, taking into account the recent results and approaches about S4 modal system in natural deduction, particularly using the structural properties of modal inference rules introduced by Medeiros in [2].

[1] GÖDEL, K., *An interpretation of the intuitionistic propositional calculus.*, **Collected Works** vol. 1. (FEFERMAN, S. et al, editors), Claredon, New York, 1986, pp. 301 - 303.

[2] MEDEIROS, M. P. N., *A new S4 classical modal logic in natural deduction.*, **The Journal of Symbolic Logic**, vol. 71 (2006), no. 3, pp.799-809.

[3] PRAWITZ, D.; MALMNÄS, P. E., *A survey of some connections between classical, intuitionistic and minimal logic*, **Contributions to mathematical logic** (SCHNDT, H., editor), North-Holland, Amsterdam, 1968, pp. 215-299.