

# SEMINÁRIO

## LÓGICA MATEMÁTICA

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### Conservative Translations Revisited

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**ABSTRACT:**

We provide sufficient conditions for the existence of a conservative translation from a consequence system to another one. We analyze the problem in many settings, namely when the consequence systems are generated by a deductive calculus or by a logic system including both proof-theoretic and model-theoretic components. We also discuss reflection of several metaproperties with the objective of showing that conservative translations provide an alternative to proving such properties from scratch. We discuss soundness and completeness, disjunction property and metatheorem of deduction among others. We provide several illustrations of conservative translations.

Keywords: conservative translation between consequence systems, reflection of metatheorems by conservative translations.

