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Hilbert's philosophy and program. (Spanish)

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The goal of this paper is to present an overview of Hilbert's philosophical thought on the foundations of mathematics. The author does not pretend to carry out a historical (or at least a chronological) treatment of Hilbert's program. He consciously analyzes "theses" not necessarily found in Hilbert's works. That is, he incorporates some of the ideas found in the works of Hilbert's followers and those of Hilbert's commentators. The article starts from a very brief idea: Hilbert claims to secure the foundations of mathematics on a pure intuition of sign (p. 34). In order to clarify and qualify this brief sentence, the author discusses what Hilbert thought the nature of mathematics to be, the philosophy of signs, the process of formalization and the concept of metamathematics. Finally, the author also discusses Gödel's work (including a detailed exposition of his 1931 results) and the impact these theorems had on Hilbert's program.

{Reviewer's remarks: On page 36, the author leaves the impression that Zermelo and Fraenkel were working together and that they both were directly persuaded by Hilbert to work on the axiomatization of set theory. From an organizational point of view, it is not clear why some sections in the paper are numbered and some others not, or why some statements are labeled "thesis" and not others. The essay is not recommended for beginners, nor for leisure reading. It assumes a detailed knowledge of philosophy (in particular, Kant) and mathematical logic (especially, Gödel numberings in proof theory). For these same reasons, however, the article is a very welcome addition to the Spanish-language literature, which is pervaded by textbooks on the history of mathematics containing "popular" but imprecise, inaccurate and superficial interpretations of Hilbert's mathematical philosophy.}

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