## **REVIEW OF**

OLIVA, PAULO; POWELL, THOMAS A GAME-THEORETIC COMPUTATIONAL INTERPRETATION OF PROOFS IN CLASSICAL ANALYSIS. GENTZEN'S CENTENARY, 501–531, SPRINGER, CHAM, 2015 (MR3443528)

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The paper first gives (sections 1–5) a self-contained presentation of the theory of selection functions, introduced by Escardo and Oliva (references 8–11). A selection function can be thought of as a semantic analogue of a Hilbert  $\epsilon$ -term, but going beyond Arithmetic: in section 5, it is recalled how selection functions can interpret computationally proofs that use classical logic and the axiom of choice.

The paper then gives (in section 6) a worked out example of the interpretation by selection function of the Bolzano-Weierstrass theorem.

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