

IN DEFENCE OF ISOMORPHISM INVARIANCE

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The isomorphism invariance criterion for logical nature has much to recommend it: it is philosophically motivated by the thought that logic is topic neutral, capable of precise set-theoretic formulation, and captures the logical constants of first-order logic with identity. Writers such as Denis Bonnay and Solomon Feferman, however, have argued that the criterion involves a conflation of logic and mathematics. We will explore these criticisms and show how our formulation of the criterion can overcome them. We will also show how many of our responses can be used to defend second-order logic more generally.