thr.1 Introduction

If we just add one more value U to \( T \) and \( F \), we get a three-valued logic. Even though there is only one more truth value, the possibilities for defining the truth-functions for \( \neg \), \( \wedge \), \( \vee \), and \( \rightarrow \) are quite numerous. Then a logic might use any combination of these truth functions, and you also have a choice of making only \( T \) designated, or both \( T \) and \( U \).

We present here a selection of the most well-known three-valued logics, their motivations, and some of their properties.

Photo Credits

Bibliography