IMPROVEMENTS OF QUASI-METRIZATION THEOREMS OF RIBEIRO AND PAREEK

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In honor of distinguished Portuguese mathematician Hugo Baptista Ribeiro's (1910—1988) hundredth birthday, I present my developments of his work on not necessarily symmetric distances called (non-Archimedean) quasi-(pseudo)metrics. My results include an extended version of a quasi-(pseudo)metrization theorem for bitopological spaces based on imperfect relevant theorems of Ribeiro (1943) and Pareek (Kuwait, 1979), and apply clever ideas of Gary Gruenhage. The axiomatic set theory I have used, is a modification of von Neumann-Bernays-Goedel extension of Zermelo-Fraenkel set theory. For example, in the theory discovered and created by me, it is undecidable whether the class of all natural numbers of Zermelo-von Neumann is a set of elements or it is not a set.