▶ JOSÉ LUIS BAUTISTA CHACÓN, *On the result of atomic triviaility Dunn-Mortensen.* Posgrado en Filosofía de la Ciencia, UNAM, Av.Universidad, No. 3000, Coyoacán, C.P. 04510, Ciudad de México, México.
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Among the domains where paraconsistent logics have been applied is the one this talk will address: inconsistent mathematics. I focus on a result obtained in algebra, in the field of real numbers. The result given by Dunn and further developed by Mortensen is that if we add a false equation to the theory of real numbers, this theory becomes atomically trivialized (that is, all equations become derivable). What is remarkable about this result is that it is not necessary to use the Explosion Principle to obtain atomic triviality. This challenges the scope of paraconsistent logics in supporting inconsistent theories of mathematics. This talk will give a reconstruction of the proof for obtaining atomic triviality, emphasizing the philosophical relevance of this problem for the possibility of an inconsistent theory of real numbers that is not atomically trivial. Then, I will present the relative units that Weber suggest for solving the problem with some objections to his proposal. Finally, I will offer an analysis of the Dunn-Mortensen proof, pointing out what I believe is driving the problem along with some ideas on how to block the proof´s result.

[1] C. Mortensen, *Prospects for inconsistency*, ***Frontiers of Paraconsistent Logic*** (D. Batens, C. Mortensen, G. Priest, and J.-P. Van Bendegem, editors), Research Studies Press, 2000, pp. 203–208.

[2] G. Priest and R. Routley, *Applications of paraconsistent logic*, ***Paraconsistent Logic: Essays on the Inconsistent*** (G. Priest, R. Routley, and J. Norman, editors), Philosophia Verlag, 1989, pp. 367–393.

[3] Z. Weber, ***Paradoxes and Inconsistent Mathematics***, Cambridge University Press, 2021.