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Title: On continuous solutions of a class of conditional equations

Author(s): Nicole Brillouët-Belluot, Janusz Brzdęk and Jacek Chudziak

Let X be a real linear topological space and $M : \mathbb{R} \rightarrow \mathbb{R}$ be continuous and multiplicative. We determine the continuous solutions $f : X \rightarrow \mathbb{R}$ of the functional equation

$$f(x + M(f(x))y)f(x)f(y)[f(x + M(f(x))y) - f(x)f(y)] = 0.$$

In this way we generalize in particular a result of Z. DARÓCZY published in 1966, concerning the continuous solutions of the Gołab–Schinzel functional equation.

Address:

Nicole Brillouët-Belluot
Ecole Centrale de Nantes
Département d'Informatique et de Mathématiques
1 rue de la Noë, B.P. 92101
44321 Nantes cedex 3
France

Address:

Janusz Brzdęk
Department of Mathematics
Pedagogical University
Podchorążych 2
30-084 Kraków
Poland

Address:

Jacek Chudziak
Department of Mathematics
University of Rzeszów
Rejtana 16A
35-310 Rzeszów
Poland