THE COMPLETENESS OF THOMPSON'S METRIC

MIRCEA-DAN RUS

ABSTRACT. We present some results concerning the completeness of Thompson's metric [A. C. Thompson, On certain contraction mappings in a partially ordered vector space. *Proc. Amer. Math. Soc.*, 14 (1963), 438-443] in the context of ordered linear spaces. In particular, we give several conditions that are equivalent to the completeness of Thompson's metric, in the setting of ordered Banach spaces.

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, DEPARTMENT OF MATHEMATICS $E\text{-}mail\ address$: rus.mircea@math.utcluj.ro

Date: April 25, 2013.