

AUSLANDER-BUCHWEITZ CONTEXT AND CO-T-STRUCTURES

VALENTE SANTIAGO VARGAS

ABSTRACT. The term co-t-structure first appeared in the work of Paukstello. This concept corresponds to the notion of weight structure studied by Bondarko. In their work, Auslander and Reiten established a bijective correspondence between the Auslander-Buchweitz contexts and cotorsion pairs in $\text{mod}(A)$ (the finitely generated modules over an artin algebra A). Following Hashimoto ideas, we introduce, for triangulated categories, the analogous of the "Auslander-Buchweitz context". We show that there exist a bijective correspondence between the Auslander-Buchweitz contexts on a triangulated category T and co-t-structures on certain triangulated subcategory of T .

E-mail address: `Valente@matem.unam.mx`

UNIVERSIDAD NACIONAL AUTNOMA DE MXICO, MXICO