

**Abstract**

**Activity decomposition of matroid perspectives**

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Our main result is that any pseudo-basis of a matroid perspective can be uniquely decomposed by a cyclic flat into two subsets one of which has zero internal activity and the other has zero external activity. This result generalises a theorem by Las Vergnas. As an application we give an expansion of the Tutte polynomial of matroid perspective over cyclic flats. This result generalises a theorem by Reiner and all. Moreover, this decomposition helps to design faster heuristics for computing the weight enumerator of linear codes.