Title: Even triangulations and commutative groups

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Abstract: This thesis takes interest in latin bitrades and triangulations constructed from them. Firstly, we introduce needed definitions, properties of the latin bitrades, detailed construction of the triangulation and mainly possibility of embedding latin bitrades into abelian groups. These groups are determined by the relations definied on vertices of the triangulation. Then we get concerned with a particular kind of 3-homogeneous latin bitrades which correspond to toroidal triangulation whose each vertex has degree six. For these groups we express relation matrix and complement to their torsion ranks. In case of simple triangulations we present explicit description of the groups and with modular arithmetic we get partial description even for more complex triangulations.

Keywords: latin bitrade, eulerian triangulation, abelian group