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Generating finite cyclic and dihedral groups using sequential insertion systems with interactions (Conference Paper)

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Abstract

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The operation of insertion has been studied extensively throughout the years for its impact in many areas of theoretical computer science such as DNA computing. First introduced as a generalization of the concatenation operation, many variants of insertion have been introduced, each with their own computational properties. In this paper, we introduce a new variant that enables the generation of some special types of groups called sequential insertion systems with interactions. We show that these new systems are able to generate all finite cyclic and dihedral groups. © 2017 Author(s).

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