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Carmen Galaz-Garcia*, carmengg@math.ucsb.edu. *New examples of pseudomodular jigsaw groups*. Preliminary report.

The cusp set of a discrete subgroup Γ of $PSL(2, (R))$ is the set of points fixed by parabolic elements of Γ . It can be checked that the cusp set of $PSL(2, \mathbb{Z})$ is $\mathbb{Q} \cup \{\infty\}$. The question that arises then is: how strong is the cusp set as an invariant of discrete subgroups of $PSL(2, (R))$? More precisely, if G also has cusp set equal to $\mathbb{Q} \cup \{\infty\}$, is it commensurable with $PSL(2, \mathbb{Z})$? The answer on the negative was provided by D. Long and A. Reid on 2001 with finitely many examples, calling them pseudomodular groups. On 2016 Lou, Tan and Vo produced two infinite families of pseudomodular groups, and called them jigsaw groups. In this talk we will show a third family of pseudomodular groups obtained with the jigsaw construction. (Received September 17, 2018)