1053-20-346 **Angela Kubena Barnhill*** (akubena@umich.edu), Department of Mathematics, University of Michigan, Ann Arbor, MI 48109, and **Anne Thomas**. *Unfolding lattices in right-angled buildings.*

For G a group and Γ a subgroup of G, recall that the *commensurator* of Γ in G is the set of all elements $g \in G$ so that G and $g\Gamma g^{-1}$ have a common finite index subgroup. In the Lie group setting, Margulis proved that a lattice is arithmetic if and only if its commensurator is dense. If X is a tree, results of Liu, Bass–Kulkarni, and Leighton show that the commensurator of every uniform lattice in $G = \mathrm{Aut}(X)$ is dense in G. When X is a right-angled building, we develop and use a technique of "unfolding" to construct new lattices and then use these lattices together with coverings of and actions on complexes of groups to show that the commensurator of the "standard uniform lattice" is dense in G. (Received September 08, 2009)