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Angela Kubena Barnhill^{*}, Department of Mathematics, Northwestern University, Evanston, IL 60208, and Anne Thomas, Department of Mathematics, Cornell University, Ithaca, NY 14853. *Lattice commensurators in right-angled buildings*. Preliminary report.

In the semisimple Lie group setting, Margulis proved that a lattice is arithmetic if and only if its commensurator is dense. In the case of automorphism groups of trees, Liu showed that every cocompact lattice has dense commensurator. We study the commensurators of cocompact lattices in the automorphism groups of right-angled buildings. This is joint work with Anne Thomas. (Received February 06, 2008)