1014-58-869   **John Ryan*** (`jryan@uark.edu`), Department of Mathematics, University of Arkansas, Fayetteville, AR 72701, and **R. S. Krausshar** (`krauss@cage.rug.ac.be`), Department of Mathematics, Gent University, Gent, Belgium. *Dirac operators and automorphic forms for some conformally flat manifolds.* Preliminary report.

In this talk we will introduce analogues of the unimodular group, $SL(2, Z)$ and its arithmetic subgroups, Γ_N. These groups act totally discontinuously on upper half space, $R^{n,+}$, in n-real dimensions. The action is described via a construction due to Ahlfors using Clifford algebras. The fundamental domains for these groups are introduced and spin structure is also introduced as is a Dirac operator, D. Basic proerties of solutions to the Dirac equation $Df = 0$ are described using automorphic forms in n-real variables. (Received September 26, 2005)