1067-Z1-1844   **luc patry*** (`luc.patry@gmail.com`), Mathematics Department, University of Arkansas at Pine Bluff, 1200 N University Drive, Pine Bluff, AR 71601. *"Rigidity" and Language of Fundamental Groups of Manifolds.* Preliminary report.

I intend to describe how language theory can be used to express the logical complexity of Poincarre groups of Riemannian Manifolds (spaces that locally resemble $\mathbb{R}^n$.) In particular, I intend to show that regular languages (the simplest of languages in Chomsky's language hierarchy theory) can "naturally" express structures of tilings of 2-manifolds (surfaces.) This talk should be accessible to anybody. (Received September 22, 2010)