

**Kevin P. Scannell** (scannell@slu.edu), Department of Mathematics and Computer Science, Saint Louis University, St. Louis, Missouri, 63103. *Generalized bending laminations for hyperbolic  $n$ -manifolds.*  
Preliminary report.

Let  $\Gamma$  be a cocompact lattice in  $SO(n, 1)$ . We are interested in the deformation theory of  $\Gamma$  when included into the larger group  $SO(n + 1, 1)$  (the theory of quasi-Fuchsian groups when  $n = 2$ ). First order deformations of this kind are parameterized by an appropriate cohomology group of  $\Gamma$  which, for  $n > 2$ , sometimes vanishes and sometimes does not. We present a construction of a geometric object in the hyperbolic manifold  $\Gamma \backslash \mathbb{H}^n$  (generalizing measured geodesic laminations when  $n = 2$ ) associated to a (not necessarily integrable) first order deformation. The construction for  $n = 2$  was given by Geoff Mess in 1990.