

1125-AE-491 **John Meier*** (meierj@lafayette.edu), Department of Mathematics, Lafayette College, Easton, PA 18042. *Finite generation and subgroups of infinite index.*

If G is a finitely generated group and H is a subgroup of finite index, then H is also finitely generated. This claim is not always true when H is of infinite index. Quite interesting geometry arises even in seemingly elementary cases, such as when G is a direct product of free groups and H is the kernel of a map from G to \mathbb{Z} . In this talk we will consider this and other examples, leading toward an instinct for how one might establish that a given infinite index subgroup is or is not finitely generated. (Received September 03, 2016)