Templated Search

- Make band presentation search practical.
- Uses braid quotients to enumerate fewer band presentations.

Template Definition

- $\phi: B_n \to H$ is a homomorphism.
- Define $\beta_{\phi} = \{\phi(\alpha\delta^{\pm}\alpha^{-1}) : \alpha \in B_n, \delta \in \{\sigma_1...\sigma_{n-1}\}\}$
- A k-template for a braid x is a tuple $(b_1,b_2,...b_k) \in \beta_{\phi}^k$ such that $b_1b_2...b_k = \phi(x)$