962-20-1192 **Aaron R Bronfman*** (`bronfman@fas.harvard.edu`), 244 Currier Mail Center, Cambridge, MA 02138-7522. *Growth Functions of the Positive Braid Monoid.* Preliminary report.

We give a complete computation of the growth function of the positive braid monoid $\mathbb{P}_n$ with respect to the standard generating set. Previously, this was known for only $\mathbb{P}_3$ and $\mathbb{P}_4$ [Xu]. Furthermore, we find a general recursion formula relating the individual growth functions. Previous computations depended on reduction of the state space (of size exponential in n) of an automaton recognizing Thurston's normal form; our new method computes in time linear in the degree of the growth function. (Received October 02, 2000)