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Title: On the shape of Bruhat intervals.

Abstract: Let (W, S) be a crystallographic Coxeter group. In particular, it could be a finite or affine Weyl group. For $w \in W$, let f_i denote the number of elements of length i below w in Bruhat order. We are interested in properties of the number sequence $f_0, f_1, \dots, f_{l(w)}$ and relations to other structural features of Bruhat intervals $\{x \in W \mid x \leq w\}$.

It is shown that

- (1) $f_i \leq f_{l(w)-i}$, for all $i \leq l(w)/2$,
- (2) $f_0 \leq f_1 \leq \dots \leq f_{l(w)/2}$,
- (3) if W is finite and w is of sufficient length (with respect to k): $f_{l(w)-k} \leq f_{l(w)-k+1} \leq \dots \leq f_{l(w)}$.

Parts (1) and (2) are true also for W modulo a parabolic subgroup.

(This is joint work with T. Ekedahl.)