

1064-05-335

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Ithaca, NY 14853. *Shortest path poset of Bruhat intervals.*

Let $u \leq v$ in Bruhat order. $[u, v]$ is endowed with rich topological and combinatorial structure; for instance, it is Gorenstein*. On the other hand, not much is known of the remaining u - v paths in the Bruhat graph $B(u, v)$ of $[u, v]$. Consider the poset $SP(u, v)$ of shortest u - v paths in $B(u, v)$. $SP(u, v)$ and $[u, v]$ have similarities; for example, if there is only one rising chain (using a reflection order) in $SP(u, v)$, then $SP(u, v)$ is also a Gorenstein*. Further properties of $SP(u, v)$ will be discussed. (Received September 14, 2010)