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Tim D Cochran and **Peter D Horn*** (pdhorn@syr.edu), Department of Mathematics,
Syracuse University, 215 Carnegie Building, Syracuse, NY 13244-1150. *Topologically slice knots
and bipolarity.*

Cochran, Harvey and the speaker introduced the *bipolar filtration* of the knot concordance group to organize the study of the group of topologically slice knots, \mathcal{T} . The filtration is decreasing $\mathcal{T} \supset \mathcal{T}_0 \supset \mathcal{T}_1 \supset \cdots \supset \mathcal{T}_n \supset \mathcal{T}_{n+1} \supset \cdots \supset \{0\}$. A knot which can be unknotted by certain crossing changes lies in \mathcal{T}_0 – the group of so-called 0-bipolar knots – though these examples do not account for all 0-bipolar knots. The concordance invariants s and τ from Khovanov and Heegaard Floer homology must vanish for any 0-bipolar knot. Using d -invariants from Heegaard Floer homology, we show that the quotient group $\mathcal{T}_0/\mathcal{T}_1$ has infinite rank. (Received August 21, 2012)