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Matt Clay, **Max Forester** and **Joel Louwsma*** (jlouwsma@ou.edu), Department of Mathematics, The University of Oklahoma, Norman, OK 73019. *Stable commutator length in Baumslag–Solitar groups.*

We obtain results both about computing stable commutator length in Baumslag–Solitar groups and about the spectrum of values it takes. In the first direction, we show that, for a certain class of elements, stable commutator length is computable and takes only rational values. We also determine exactly which elements of this class admit extremal surfaces. Our techniques additionally give lower bounds on the stable commutator length of all elements. In the second direction, we show that there is a uniform gap in the stable commutator length spectrum: no element of a Baumslag–Solitar group has stable commutator length between 0 and $1/12$. Some of the techniques we use to show this apply more generally to other groups acting on trees. (Received September 07, 2013)