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Felipe Castellano-Macias* (castellanomacias.f@husky.neu.edu) and **Nicholas Owad**. *The tunnel number of all 11 and 12 crossing alternating knots.*

Given a knot K , tunnel number is a knot invariant which can be defined as one less than the Heegaard genus of $S^3 \setminus N(K)$, or equivalently, as the minimum number of properly embedded disjoint arcs α_i required to make $S^3 \setminus N(K \cup \{\alpha_i\})$ a handlebody. Morimoto, Sakuma, and Yokota computed the tunnel numbers of all knots with 10 or less crossings. Using exhaustive techniques together with results from Lackenby and many others, we compute the tunnel number of all 1655 alternating 11 and 12 crossing knots. These techniques also allow us to compute the tunnel number of some non-alternating knots with 11 and 12 crossings. (Received September 17, 2019)