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Jason Parsley* (parslerj@wfu.edu) and **Eric Rawdon**. *Census of Petal Knots*. Preliminary report.

This is joint work with Eric Rawdon (and many students). A petal diagram for a knot resembles a flower with n petals, symmetrically placed around a central point. Petal diagrams were introduced by Colin Adams and his students, who showed that every knot has a petal diagram, indexed by a permutation in S_n . Our work builds a census of all petal knots with 13 or fewer petals – over 480 million diagrams, classified by knot type. We study the properties of these petal knots and draw connections to both classical and modern knot invariants. (Received August 18, 2020)