1145-05-271   **Gary Gordon** and **Keith Vreeland*** (`vreelank@lafayette.edu`). *Leafiness of Trees.* Preliminary report.

For each subtree S of a given tree T, we compute the ratio of the number of leaves of S to the number of vertices of S. Using this statistic in a variety of ways, we give several definitions of global and local versions of the *leafiness* of a tree. For the global invariants, we are interested in families of trees that maximize or minimize the leafiness. For a fixed tree, we consider which vertices maximize and minimize the local versions of these invariants. In particular, we consider the leafiness for the *center, centroid,* and *core* of the tree. (Received August 27, 2018)