Peter Doyle, Jay Pantone* (jay.pantone@gmail.com) and Everett Sullivan. How many chord diagrams have no short chords? Preliminary report.

A chord diagram with n chords is a set of 2n points in a line connected in n pairs. Chord diagrams, sometimes called matchings, play an important role in mathematical biology, knot theory, and combinatorics, and as a result they have been intensely studied by mathematicians, computer scientists, and biologists alike. We use a combination of symbolic, analytic, and experimental methods to examine the enumeration of chord diagrams without short chords. (Received September 21, 2018)