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Connectivity and terminal chords in chord diagrams

Motivated by chord diagram expansions appearing in recent solutions for certain analytic Dyson-Schwinger equations from quantum field theory, we present a bijection between chord diagrams of size $n - 1$ and chord diagrams of size n with exactly one terminal chord, a sink vertex in the directed intersection graph of the diagram. We then describe several results towards characterizing the relationship between this bijection and the connectivity of chord diagrams.