

Diagram illustrating the construction of a Coxeter-Dynkin diagram for a 6D root system. The diagram is a tree structure starting from a root node labeled $-1 -6 -4 -3 2 5$. The root has three children: $3 -4 6 1 2 5$, $-1 -6 -4 -3 -2 5$, and $-1 -6 -5 -2 3 4$. The node $3 -4 6 1 2 5$ has three children: $-1 -6 -4 -3 -2 5$, $-1 -6 -4 -3 -2 5$, and $-1 -6 -5 -2 3 4$. The node $-1 -6 -4 -3 -2 5$ has three children: $3 -4 6 1 2 5$, $-1 -6 -4 -3 -2 5$, and $-1 -6 -5 -2 3 4$. The node $-1 -6 -5 -2 3 4$ has three children: $3 -4 6 1 2 5$, $-1 -6 -4 -3 -2 5$, and $-1 -6 -5 -2 3 4$. The diagram shows the branching structure and the labels for the nodes, which are permutations of the roots of the 6D root system.