

Diagram illustrating the structure of the W_{24} Coxeter group, showing the root system and its associated Dynkin diagram. The diagram consists of nodes (roots) and edges (simple roots). The roots are labeled with their coordinates in the root system, and the edges are labeled with the corresponding simple roots. The diagram shows a branching structure with a central node labeled $-1 -6 2 5 -4 -3$ and several other nodes connected by edges. The edges are labeled with simple roots: $3 -4$, $2 -1$, $2 -3$, $5 -6$, and $5 -4$. The diagram also includes labels for various subgroups and their corresponding root systems, such as $4D_5$, $4D_4$, $4D_3$, $4D_2$, $4D_1$, $4D_0$, $4D_{-1}$, $4D_{-2}$, $4D_{-3}$, $4D_{-4}$, $4D_{-5}$, $4D_{-6}$, $4D_{-7}$, $4D_{-8}$, $4D_{-9}$, $4D_{-10}$, $4D_{-11}$, $4D_{-12}$, $4D_{-13}$, $4D_{-14}$, $4D_{-15}$, $4D_{-16}$, $4D_{-17}$, $4D_{-18}$, $4D_{-19}$, $4D_{-20}$, $4D_{-21}$, $4D_{-22}$, $4D_{-23}$, $4D_{-24}$, $4D_{-25}$, $4D_{-26}$, $4D_{-27}$, $4D_{-28}$, $4D_{-29}$, $4D_{-30}$, $4D_{-31}$, $4D_{-32}$, $4D_{-33}$, $4D_{-34}$, $4D_{-35}$, $4D_{-36}$, $4D_{-37}$, $4D_{-38}$, $4D_{-39}$, $4D_{-40}$, $4D_{-41}$, $4D_{-42}$, $4D_{-43}$, $4D_{-44}$, $4D_{-45}$, $4D_{-46}$, $4D_{-47}$, $4D_{-48}$, $4D_{-49}$, $4D_{-50}$, $4D_{-51}$, $4D_{-52}$, $4D_{-53}$, $4D_{-54}$, $4D_{-55}$, $4D_{-56}$, $4D_{-57}$, $4D_{-58}$, $4D_{-59}$, $4D_{-60}$, $4D_{-61}$, $4D_{-62}$, $4D_{-63}$, $4D_{-64}$, $4D_{-65}$, $4D_{-66}$, $4D_{-67}$, $4D_{-68}$, $4D_{-69}$, $4D_{-70}$, $4D_{-71}$, $4D_{-72}$, $4D_{-73}$, $4D_{-74}$, $4D_{-75}$, $4D_{-76}$, $4D_{-77}$, $4D_{-78}$, $4D_{-79}$, $4D_{-80}$, $4D_{-81}$, $4D_{-82}$, $4D_{-83}$, $4D_{-84}$, $4D_{-85}$, $4D_{-86}$, $4D_{-87}$, $4D_{-88}$, $4D_{-89}$, $4D_{-90}$, $4D_{-91}$, $4D_{-92}$, $4D_{-93}$, $4D_{-94}$, $4D_{-95}$, $4D_{-96}$, $4D_{-97}$, $4D_{-98}$, $4D_{-99}$, $4D_{-100}$.