

Diagram illustrating the structure of the  $2-1-6-5-3-4$  root system. The root system is shown as a tree structure with nodes labeled by their corresponding root vectors. The root is  $2-1-6-5-3-4$ . The root system is decomposed into four main branches, each corresponding to a different root system:

- Left Branch:** Rooted at  $2-1-3-5-6-4$ . It branches into three sub-branches:  $2-1$ ,  $2-3$ , and  $5-6$ .
- Middle-Left Branch:** Rooted at  $30DUP-2-1-6-5-3-4$ . It branches into three sub-branches:  $6-5$ ,  $3-2$ , and  $4-5$ .
- Middle-Right Branch:** Rooted at  $38DUP-2-1-6-5-3-4$ . It branches into two sub-branches:  $2-1$  and  $4-5$ .
- Right Branch:** Rooted at  $2-1-6-5-4-3$ . It branches into three sub-branches:  $2-1$ ,  $2-3$ , and  $6-5$ .

The diagram shows the hierarchical structure of the root system, with each node representing a root vector and the edges representing the relationships between them. The root system is a complex structure with many branches and sub-branches, illustrating the intricate nature of the  $2-1-6-5-3-4$  root system.