

The figure displays 48 Dynkin diagrams for rank 4 root systems, organized in a 4x12 grid. Each diagram is labeled with a root system identifier and contains nodes (blue dots) and edges (black lines) representing the root system structure.

**Row 1:**

- $A_4$ : A path of 4 nodes.
- $B_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes.
- $C_4$ : A path of 4 nodes with a double line between the 1st and 2nd nodes.
- $D_4$ : A path of 3 nodes with a 4th node connected to the 2nd node.
- $E_4$ : A path of 5 nodes.
- $F_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes and an arrow pointing from 3 to 4.
- $G_2 \times A_2$ : Two disconnected components: a 2-node path and a 2-node path with a double line.
- $H_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes and an arrow pointing from 3 to 4.

**Row 2:**

- $A_4$ : A path of 4 nodes.
- $B_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes.
- $C_4$ : A path of 4 nodes with a double line between the 1st and 2nd nodes.
- $D_4$ : A path of 3 nodes with a 4th node connected to the 2nd node.
- $E_4$ : A path of 5 nodes.
- $F_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes and an arrow pointing from 3 to 4.
- $G_2 \times A_2$ : Two disconnected components: a 2-node path and a 2-node path with a double line.
- $H_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes and an arrow pointing from 3 to 4.

**Row 3:**

- $A_4$ : A path of 4 nodes.
- $B_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes.
- $C_4$ : A path of 4 nodes with a double line between the 1st and 2nd nodes.
- $D_4$ : A path of 3 nodes with a 4th node connected to the 2nd node.
- $E_4$ : A path of 5 nodes.
- $F_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes and an arrow pointing from 3 to 4.
- $G_2 \times A_2$ : Two disconnected components: a 2-node path and a 2-node path with a double line.
- $H_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes and an arrow pointing from 3 to 4.

**Row 4:**

- $A_4$ : A path of 4 nodes.
- $B_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes.
- $C_4$ : A path of 4 nodes with a double line between the 1st and 2nd nodes.
- $D_4$ : A path of 3 nodes with a 4th node connected to the 2nd node.
- $E_4$ : A path of 5 nodes.
- $F_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes and an arrow pointing from 3 to 4.
- $G_2 \times A_2$ : Two disconnected components: a 2-node path and a 2-node path with a double line.
- $H_4$ : A path of 4 nodes with a double line between the 3rd and 4th nodes and an arrow pointing from 3 to 4.