

PREHOMOGENEOUS SPACES ASSOCIATED WITH NILPOTENT ORBITS IN TYPE EIII

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Nilpotent orbits in type EIII				
Orbit	$K_{\mathbb{C}}$ diagram	i	$\dim \mathfrak{g}_{\mathbb{C}}^i \cap \mathfrak{p}_{\mathbb{C}}$	Highest weights of $\mathfrak{g}_{\mathbb{C}}^i \cap \mathfrak{p}_{\mathbb{C}}$
1.		1	10	$(0, 0, 1, 0, -1, 0)$
		2	1	$(0, 0, 0, 0, 1, 0)$
2.		1	10	$(0, 0, 1, -1, 0, -1)$
		2	1	$(0, 0, 0, 1, 0, -2)$
3.		1	8	$(-1, 0, 0, 1, 0, 0)$
		2	8	$(0, 0, 0, 0, 1, 0)$
4.		1	8	$(-1, 0, 0, 0, 1, -1)$
		2	8	$(0, 0, 0, 1, 0, -2)$
5.		1	8	$(0, 0, 1, -1, 0, -1)$ $(0, 0, 1, 0, -1, 0)$
		2	2	$(0, 0, 0, 1, 0, -2)$ $(0, 0, 0, 0, 1, 0)$
6.		2	8	$(0, 0, 0, 1, 0, -2)$ $(0, 0, 0, 0, 1, 0)$
7.		1	7	$(0, 0, 1, -1, 0, -1)$ $(-1, 0, 0, 1, 0, 0)$ $(1, -1, 1, -1, 0, 1)$
		2	3	$(0, 0, 0, 1, 0, -2)$ $(0, 1, 0, -1, 0, 1)$ $(1, -1, 0, 1, 0, 0)$
		3	3	$(0, 0, 0, 0, 1, 0)$
8.		1	7	$(1, -1, 1, 0, -1, -1)$ $(-1, 0, 0, 0, 1, -1)$ $(0, 0, 1, 0, -1, 0)$
		2	3	$(0, 1, 0, 0, -1, -1)$ $(1, -1, 0, 0, 1, -1)$ $(0, 0, 0, 0, 1, 0)$
(continued on next page)				

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Nilpotent orbits in type EIII (continued)				
Orbit	$K_{\mathbb{C}}$ diagram	i	$\dim \mathfrak{g}_{\mathbb{C}}^i \cap \mathfrak{p}_{\mathbb{C}}$	Highest weights of $\mathfrak{g}_{\mathbb{C}}^i \cap \mathfrak{p}_{\mathbb{C}}$
		3	3	$(0, 0, 0, 1, 0, -2)$
9.		2	16	$(0, 0, 0, 1, 0, -2)$ $(0, 0, 0, 0, 1, 0)$
10.		1	4	$(0, 0, 1, -1, 0, -1)$
		2	7	$(0, 0, 0, 1, 0, -2)$ $(0, 1, 0, -1, 0, 1)$
		3	4	$(0, 0, 1, 0, -1, 0)$
		6	1	$(0, 0, 0, 0, 1, 0)$
11.		1	4	$(0, 0, 1, 0, -1, 0)$
		2	7	$(0, 1, 0, 0, -1, -1)$ $(0, 0, 0, 0, 1, 0)$
		3	4	$(0, 0, 1, -1, 0, -1)$
		6	1	$(0, 0, 0, 1, 0, -2)$
12.		2	6	$(0, 1, 0, 0, -1, -1)$ $(1, -1, 0, 0, 1, -1)$ $(0, 1, 0, -1, 0, 1)$ $(1, -1, 0, 1, 0, 0)$
		4	4	$(0, 0, 1, -1, 0, -1)$ $(0, 0, 1, 0, -1, 0)$
		6	2	$(0, 0, 0, 1, 0, -2)$ $(0, 0, 0, 0, 1, 0)$

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