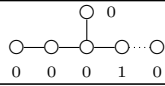
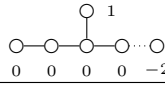
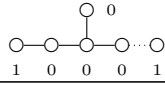
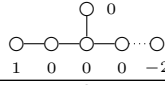
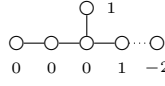
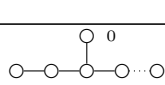
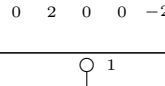
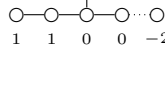


PREHOMOGENEOUS SPACES ASSOCIATED WITH NILPOTENT ORBITS IN TYPE EIII

STEVEN GLENN JACKSON AND ALFRED G. NOËL

Nilpotent orbits in type EIII				
Orbit	$K_{\mathbb{C}}$ diagram	i	$\dim \mathfrak{g}_{\mathbb{C}}^i \cap \mathfrak{k}_{\mathbb{C}}$	Highest weights of $\mathfrak{g}_{\mathbb{C}}^i \cap \mathfrak{k}_{\mathbb{C}}$
1.		1	10	$(0, 1, 0, 0, 0, -1)$
2.		1	10	$(0, 1, 0, 0, 0, -1)$
3.		1	8	$(0, 1, 0, 0, 0, -1)$
4.		1	8	$(0, 1, 0, 0, 0, -1)$
5.		1	8	$(1, 0, 0, 1, -1, -1)$ $(1, 0, 0, -1, 1, 0)$
		2	6	$(0, 1, 0, 0, 0, -1)$
6.		2	12	$(1, -1, 1, 0, 0, -1)$
		4	1	$(0, 1, 0, 0, 0, -1)$
7.		1	7	$(2, -1, 0, 0, 0, 0)$ $(0, -1, 0, 1, 1, -1)$ $(-1, 1, 0, -1, 1, 0)$
		2	6	$(1, 0, 0, -1, 1, 0)$ $(-1, 0, 1, 0, 0, -1)$
		3	3	$(1, -1, 1, 0, 0, -1)$
		4	1	$(0, 1, 0, 0, 0, -1)$
8.		1	7	$(2, -1, 0, 0, 0, 0)$ $(-1, 1, 0, 1, -1, -1)$ $(0, -1, 0, 1, 1, -1)$
		2	6	$(1, 0, 0, 1, -1, -1)$ $(-1, 0, 1, 0, 0, -1)$
		3	3	$(1, -1, 1, 0, 0, -1)$
		4	1	$(0, 1, 0, 0, 0, -1)$
9.		4	8	$(0, 1, 0, 0, 0, -1)$

(continued on next page)

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Key words and phrases. Lie group, nilpotent orbit, prehomogeneous space.

Nilpotent orbits in type EIII (continued)				
Orbit	$K_{\mathbb{C}}$ diagram	i	$\dim \mathfrak{g}_{\mathbb{C}}^i \cap \mathfrak{k}_{\mathbb{C}}$	Highest weights of $\mathfrak{g}_{\mathbb{C}}^i \cap \mathfrak{k}_{\mathbb{C}}$
10.		1	4	$(1, 0, 0, 1, -1, -1)$
		3	4	$(1, 0, 0, -1, 1, 0)$
		4	6	$(0, 1, 0, 0, 0, -1)$
11.		1	4	$(1, 0, 0, -1, 1, 0)$
		3	4	$(1, 0, 0, 1, -1, -1)$
		4	6	$(0, 1, 0, 0, 0, -1)$
12.		2	8	$(0, -1, 1, 1, -1, -1)$ $(0, -1, 1, -1, 1, 0)$ $(1, 0, 1, -1, -1, 0)$
		4	5	$(0, -1, 0, 1, 1, -1)$ $(1, 0, 0, 1, -1, -1)$ $(1, 0, 0, -1, 1, 0)$
		6	4	$(1, -1, 1, 0, 0, -1)$
		8	1	$(0, 1, 0, 0, 0, -1)$

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