

PREHOMOGENEOUS SPACES ASSOCIATED WITH NILPOTENT ORBITS IN $G_2(\mathbb{C})$

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Nilpotent orbits in type G_2				
Bala-Carter label	Diagram	i	$\dim \mathfrak{g}_i$	Highest weights of $\mathfrak{g}_i$
A_1		1	4	$(3, -1)$
		2	1	$(0, 1)$
$\tilde{A}_1$		1	2	$(-1, 1)$
		2	1	$(1, 0)$
		3	2	$(0, 1)$
$G_2(a_1)$		2	4	$(3, -1)$
		4	1	$(0, 1)$
G_2		2	2	$(2, -1)$ $(-3, 2)$
		4	1	$(-1, 1)$
		6	1	$(1, 0)$
		8	1	$(3, -1)$
		10	1	$(0, 1)$

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