Table 1: Ferminonic case $\wedge^3\mathbb{C}^9$

dominant 1-PS	Inequality	w
$(2,2,-1,-1,-1,-1,-1,-1,-4)$	$2\lambda_1+2\lambda_2-4\lambda_3-\lambda_4-\lambda_5-\lambda_6-\lambda_7-\lambda_8-\lambda_9\geq 0$	$(0,1,3,4,5,6,7,8,2)$
	$-\lambda_1+2\lambda_2-\lambda_3-\lambda_4+2\lambda_5-\lambda_6-4\lambda_7-\lambda_8-\lambda_9\geq 0$	$(1,4,0,2,3,5,7,8,6)$
	$-\lambda_1+2\lambda_2-\lambda_3+2\lambda_4-\lambda_5-4\lambda_6-\lambda_7-\lambda_8-\lambda_9\geq 0$	$(1,3,0,2,4,6,7,8,5)$
	$2\lambda_1-\lambda_2-\lambda_3-\lambda_4-\lambda_5-\lambda_6-\lambda_7+2\lambda_8-4\lambda_9\geq 0$	$(0,7,1,2,3,4,5,6,8)$
	$-\lambda_1-\lambda_2+2\lambda_3+2\lambda_4-\lambda_5-\lambda_6-4\lambda_7-\lambda_8-\lambda_9\geq 0$	$(2,3,0,1,4,5,7,8,6)$
	$2\lambda_1-\lambda_2-\lambda_3+2\lambda_4-4\lambda_5-\lambda_6-\lambda_7-\lambda_8-\lambda_9\geq 0$	$(0,3,1,2,5,6,7,8,4)$
	$2\lambda_1-\lambda_2-\lambda_3-\lambda_4-\lambda_5+2\lambda_6-4\lambda_7-\lambda_8-\lambda_9\geq 0$	$(0,5,1,2,3,4,7,8,6)$
$(1,0,0,0,0,-1,-1,-1,-1)$	$\lambda_2-\lambda_3-\lambda_6-\lambda_7-\lambda_9\geq 0$	$(1,0,3,4,7,2,5,6,8)$
	$\lambda_4-\lambda_5-\lambda_6-\lambda_7-\lambda_9\geq 0$	$(3,0,1,2,7,4,5,6,8)$
	$\lambda_1-\lambda_3-\lambda_5-\lambda_7-\lambda_9\geq 0$	$(0,1,3,5,7,2,4,6,8)$
$(2,1,1,0,-1,-1,-2,-3,-3)$	$2\lambda_1-2\lambda_2-\lambda_3-\lambda_4+\lambda_6-3\lambda_7+\lambda_8-3\lambda_9\geq 0$	$(0,5,7,4,2,3,1,6,8)$
	$\lambda_1+2\lambda_2-3\lambda_3+\lambda_4-3\lambda_5-2\lambda_6-\lambda_7-\lambda_9\geq 0$	$(1,0,3,7,6,8,5,2,4)$
	$\lambda_1+\lambda_2-2\lambda_3+2\lambda_4-3\lambda_5-3\lambda_6-\lambda_7-\lambda_8\geq 0$	$(3,0,1,8,6,7,2,4,5)$
	$\lambda_1+2\lambda_2-3\lambda_3-\lambda_4-2\lambda_5-\lambda_6+\lambda_8-3\lambda_9\geq 0$	$(1,0,7,6,3,5,4,2,8)$
	$2\lambda_1+\lambda_2-3\lambda_3+\lambda_4-3\lambda_5-2\lambda_6-\lambda_7-\lambda_8\geq 0$	$(0,1,3,8,6,7,5,2,4)$
	$2\lambda_1+\lambda_2-3\lambda_3-2\lambda_4-\lambda_5-\lambda_6+\lambda_8-3\lambda_9\geq 0$	$(0,1,7,6,4,5,3,2,8)$
	$\lambda_1+2\lambda_2-3\lambda_3+\lambda_4-2\lambda_5-3\lambda_6-\lambda_7-\lambda_8\geq 0$	$(1,0,3,8,6,7,4,2,5)$
	$-\lambda_1+\lambda_3+2\lambda_4-3\lambda_5-2\lambda_6-\lambda_7+\lambda_8-3\lambda_9\geq 0$	$(3,2,7,1,0,6,5,4,8)$
$(5,2,2,-1,-1,-4,-4,-7,-7)$	$2\lambda_1+2\lambda_2-4\lambda_3+5\lambda_4-7\lambda_5-7\lambda_6-\lambda_7-4\lambda_8-\lambda_9\geq 0$	$(3,0,1,6,8,2,7,4,5)$
	$2\lambda_1+5\lambda_2-7\lambda_3-4\lambda_4+2\lambda_5-\lambda_6-7\lambda_7-4\lambda_8-\lambda_9\geq 0$	$(1,0,4,5,8,3,7,2,6)$
	$-\lambda_1-\lambda_2+2\lambda_3+5\lambda_4-7\lambda_5-4\lambda_6-4\lambda_7+2\lambda_8-7\lambda_9\geq 0$	$(3,2,7,0,1,5,6,4,8)$
	$5\lambda_1-4\lambda_2-\lambda_3+2\lambda_4-7\lambda_5-4\lambda_6-\lambda_7+2\lambda_8-7\lambda_9\geq 0$	$(0,3,7,2,6,1,5,4,8)$
	$2\lambda_1-4\lambda_2+2\lambda_3+5\lambda_4-7\lambda_5-\lambda_6-7\lambda_7-4\lambda_8-\lambda_9\geq 0$	$(3,0,2,5,8,1,7,4,6)$
	$5\lambda_1-4\lambda_2-\lambda_3+2\lambda_4-7\lambda_5+2\lambda_6-7\lambda_7-4\lambda_8-\lambda_9\geq 0$	$(0,3,5,2,8,1,7,4,6)$

	$5\lambda_1 + 2\lambda_2 - 7\lambda_3 - 4\lambda_4 - \lambda_5 - 4\lambda_6 - \lambda_7 + 2\lambda_8 - 7\lambda_9 \geq 0$	$(0, 1, 7, 4, 6, 3, 5, 2, 8)$
	$5\lambda_1 - 4\lambda_2 - \lambda_3 - 4\lambda_4 - \lambda_5 + 2\lambda_6 - 7\lambda_7 + 2\lambda_8 - 7\lambda_9 \geq 0$	$(0, 5, 7, 2, 4, 1, 3, 6, 8)$
	$5\lambda_1 + 2\lambda_2 - 7\lambda_3 - 4\lambda_4 - \lambda_5 + 2\lambda_6 - 7\lambda_7 - 4\lambda_8 - \lambda_9 \geq 0$	$(0, 1, 5, 4, 8, 3, 7, 2, 6)$
	$5\lambda_1 + 2\lambda_2 - 7\lambda_3 + 2\lambda_4 - 7\lambda_5 - 4\lambda_6 - \lambda_7 - 4\lambda_8 - \lambda_9 \geq 0$	$(0, 1, 3, 6, 8, 5, 7, 2, 4)$
	$2\lambda_1 + 5\lambda_2 - 7\lambda_3 + 2\lambda_4 - 7\lambda_5 - 4\lambda_6 - \lambda_7 - \lambda_8 - 4\lambda_9 \geq 0$	$(1, 0, 3, 6, 7, 5, 8, 2, 4)$
	$2\lambda_1 + 5\lambda_2 - 7\lambda_3 - \lambda_4 - 4\lambda_5 - 4\lambda_6 - \lambda_7 + 2\lambda_8 - 7\lambda_9 \geq 0$	$(1, 0, 7, 3, 6, 4, 5, 2, 8)$
	$-4\lambda_1 + 2\lambda_2 + 2\lambda_3 + 5\lambda_4 - \lambda_5 - 7\lambda_6 - 7\lambda_7 - 4\lambda_8 - \lambda_9 \geq 0$	$(3, 1, 2, 4, 8, 0, 7, 5, 6)$
	$2\lambda_1 + 5\lambda_2 - 7\lambda_3 + 2\lambda_4 - 4\lambda_5 - 7\lambda_6 - \lambda_7 - 4\lambda_8 - \lambda_9 \geq 0$	$(1, 0, 3, 6, 8, 4, 7, 2, 5)$
	$-4\lambda_1 + 5\lambda_2 - \lambda_3 + 2\lambda_4 + 2\lambda_5 - 7\lambda_6 - 7\lambda_7 - 4\lambda_8 - \lambda_9 \geq 0$	$(1, 3, 4, 2, 8, 0, 7, 5, 6)$
$(1, 1, 0, 0, 0, -1, -1, -1, -2)$	$\lambda_1 + \lambda_2 - 2\lambda_3 - \lambda_5 - \lambda_6 - \lambda_7 \geq 0$	$(0, 1, 3, 7, 8, 4, 5, 6, 2)$
	$\lambda_1 - \lambda_3 - \lambda_4 - \lambda_5 + \lambda_8 - 2\lambda_9 \geq 0$	$(0, 7, 1, 5, 6, 2, 3, 4, 8)$
	$\lambda_2 - \lambda_3 + \lambda_4 - 2\lambda_5 - \lambda_6 - \lambda_8 \geq 0$	$(1, 3, 0, 6, 8, 2, 5, 7, 4)$
	$\lambda_2 - \lambda_3 + \lambda_4 - \lambda_5 - 2\lambda_6 - \lambda_7 \geq 0$	$(1, 3, 0, 7, 8, 2, 4, 6, 5)$
	$-\lambda_1 + \lambda_3 + \lambda_4 - 2\lambda_6 - \lambda_7 - \lambda_8 \geq 0$	$(2, 3, 1, 4, 8, 0, 6, 7, 5)$
	$-\lambda_1 + \lambda_2 + \lambda_5 - 2\lambda_6 - \lambda_7 - \lambda_8 \geq 0$	$(1, 4, 2, 3, 8, 0, 6, 7, 5)$
	$\lambda_1 - \lambda_3 + \lambda_4 - 2\lambda_5 - \lambda_6 - \lambda_7 \geq 0$	$(0, 3, 1, 7, 8, 2, 5, 6, 4)$
	$\lambda_1 - \lambda_2 - \lambda_3 - \lambda_7 + \lambda_8 - 2\lambda_9 \geq 0$	$(0, 7, 3, 4, 5, 1, 2, 6, 8)$
	$\lambda_1 - \lambda_2 - \lambda_3 + \lambda_6 - 2\lambda_7 - \lambda_9 \geq 0$	$(0, 5, 3, 4, 7, 1, 2, 8, 6)$
	$\lambda_1 + \lambda_2 - 2\lambda_3 - \lambda_4 - \lambda_5 - \lambda_9 \geq 0$	$(0, 1, 5, 6, 7, 3, 4, 8, 2)$
$(2, 2, 2, -1, -1, -1, -4, -4, -4)$	$2\lambda_1 + 2\lambda_2 - 4\lambda_3 + 2\lambda_4 - 4\lambda_5 - 4\lambda_6 - \lambda_7 - \lambda_8 - \lambda_9 \geq 0$	$(0, 1, 3, 6, 7, 8, 2, 4, 5)$
$(0, 0, 0, 0, 0, 0, 0, 0, -1)$	$-\lambda_9 \geq 0$	$(0, 1, 2, 3, 4, 5, 6, 7, 8)$
$(4, 1, 1, 1, -2, -2, -5, -5, -5)$	$\lambda_1 + 4\lambda_2 - 5\lambda_3 + \lambda_4 - 5\lambda_5 - 2\lambda_6 - 2\lambda_7 + \lambda_8 - 5\lambda_9 \geq 0$	$(1, 0, 3, 7, 5, 6, 2, 4, 8)$
	$\lambda_1 + 4\lambda_2 - 5\lambda_3 - 2\lambda_4 + \lambda_5 - 5\lambda_6 - 2\lambda_7 + \lambda_8 - 5\lambda_9 \geq 0$	$(1, 0, 4, 7, 3, 6, 2, 5, 8)$
	$-2\lambda_1 + \lambda_2 + \lambda_3 + 4\lambda_4 - 5\lambda_5 - 2\lambda_6 - 5\lambda_7 + \lambda_8 - 5\lambda_9 \geq 0$	$(3, 1, 2, 7, 0, 5, 4, 6, 8)$
	$\lambda_1 - 2\lambda_2 + \lambda_3 + 4\lambda_4 - 5\lambda_5 - 5\lambda_6 - 2\lambda_7 + \lambda_8 - 5\lambda_9 \geq 0$	$(3, 0, 2, 7, 1, 6, 4, 5, 8)$
$(1, 1, 1, 1, -2, -2, -2, -2, -2)$	$\lambda_1 - 2\lambda_2 + \lambda_3 + \lambda_4 - 2\lambda_5 + \lambda_6 - 2\lambda_7 - 2\lambda_8 - 2\lambda_9 \geq 0$	$(0, 2, 3, 5, 1, 4, 6, 7, 8)$
	$\lambda_1 + \lambda_2 - 2\lambda_3 - 2\lambda_4 + \lambda_5 + \lambda_6 - 2\lambda_7 - 2\lambda_8 - 2\lambda_9 \geq 0$	$(0, 1, 4, 5, 2, 3, 6, 7, 8)$
	$-2\lambda_1 + \lambda_2 + \lambda_3 + \lambda_4 + \lambda_5 - 2\lambda_6 - 2\lambda_7 - 2\lambda_8 - 2\lambda_9 \geq 0$	$(1, 2, 3, 4, 0, 5, 6, 7, 8)$
	$\lambda_1 + \lambda_2 - 2\lambda_3 + \lambda_4 - 2\lambda_5 - 2\lambda_6 + \lambda_7 - 2\lambda_8 - 2\lambda_9 \geq 0$	$(0, 1, 3, 6, 2, 4, 5, 7, 8)$