Structure constants of the Lie Algebra:

$(0,0)(0,0)(0,0)(15,1)(0,0)(13,1)$

Symplectic form

$\omega = e^{12} + e^{34} + e^{56}$

Derivatives of $3-$forms

$d(e^{234}) = e^{1235}$

$d(e^{246}) = (-1)e^{1234} + e^{1256}$

$d(e^{256}) = (-1)e^{1235}$

$d(e^{346}) = e^{1356}$

$d(e^{456}) = e^{1345}$

Derivatives of $2-$forms

$d(e^{24}) = e^{125}$

$d(e^{26}) = e^{123}$

$d(e^{34}) = e^{135}$

$d(e^{46}) = (-1)e^{134} + e^{156}$

$d(e^{56}) = (-1)e^{135}$

$d\Lambda d$ **of $3-$forms**

$d\Lambda d(e^{246}) = (-2)e^{135}$

Structure constants of the Lie Algebra:

$(0,0)(0,0)(0,0)(0,0)(12,1)(13,1)$

Symplectic form

$\omega = (-1)e^{16} + e^{25} + e^{34}$

Derivatives of $3-$forms

$d(e^{246}) = (-1)e^{1234}$

$d(e^{256}) = (-1)e^{1235}$

$d(e^{345}) = e^{1234}$

$d(e^{356}) = (-1)e^{1236}$

$d(e^{456}) = (-1)e^{1246} + e^{1345}$

Derivatives of $2-$forms

$d(e^{26}) = e^{123}$

$d(e^{35}) = (-1)e^{123}$

$d(e^{45}) = (-1)e^{124}$

$d(e^{46}) = (-1)e^{134}$

$d(e^{56}) = e^{126} + (-1)e^{135}$

$d\Lambda d$ **of $3-$forms**

Structure constants of the Lie Algebra:

$(0,0)(35,1)(0,0)(15,0.5)(0,0)(13,-0.5)$

Symplectic form

$\omega = e^{12} + e^{34} + e^{56}$

Derivatives of $3-$forms

$d(e^{124}) = e^{1345}$

$d(e^{126}) = (-1)e^{1356}$

$d(e^{234}) = 0.5e^{1235}$

$d(e^{246}) = 0.5e^{1234} + 0.5e^{1256} + (-1)e^{3456}$

$d(e^{256}) = 0.5e^{1235}$

$d(e^{346}) = 0.5e^{1356}$

$d(e^{456}) = (-0.5)e^{1345}$

Derivatives of $2-$forms

$d(e^{12}) = (-1)e^{135}$

$d(e^{24}) = 0.5e^{125} + (-1)e^{345}$

$d(e^{26}) = (-0.5)e^{123} + e^{356}$

$d(e^{34}) = 0.5e^{135}$

$d(e^{46}) = 0.5e^{134} + 0.5e^{156}$

$d(e^{56}) = 0.5e^{135}$

$d\Lambda d$ of $3-$forms

$d\Lambda d(e^{246}) = (-1.5)e^{135}$

Structure constants of the Lie Algebra:

$(0,0)(0,0)(0,0)(12,1)(13,1)(23,1)$

Symplectic form

$\omega = 2e^{16} + e^{25} + (-1)e^{34}$

Derivatives of $3-$forms

$d(e^{146}) = e^{1234}$

$d(e^{156}) = e^{1235}$

$d(e^{245}) = (-1)e^{1234}$

$d(e^{256}) = e^{1236}$

$d(e^{345}) = (-1)e^{1235}$

$d(e^{346}) = (-1)e^{1236}$

$d(e^{456}) = e^{1256} + (-1)e^{1346} + e^{2345}$

Derivatives of $2-$forms

$d(e^{16}) = (-1)e^{123}$

$d(e^{25}) = e^{123}$

$d(e^{34}) = (-1)e^{123}$

$d(e^{45}) = e^{125} + (-1)e^{134}$

$d(e^{46}) = e^{126} + (-1)e^{234}$

$d(e^{56}) = e^{136} + (-1)e^{235}$

$d\Lambda d$ of $3-$forms

$d\Lambda d(e^{456}) = (-3)e^{123}$

Structure constants of the Lie Algebra:

$(15, -2)(25, 2)(36, -2)(46, 2)(0, 0)(0, 0)$

Symplectic form

$\omega = e^{12} + e^{34} + e^{56}$

Derivatives of $3-$forms

$d(e^{123}) = (-2)e^{1236}$

$d(e^{124}) = 2e^{1246}$

$d(e^{134}) = (-2)e^{1345}$

$d(e^{135}) = (-2)e^{1356}$

$d(e^{136}) = 2e^{1356}$

$d(e^{145}) = 2e^{1456}$

$d(e^{146}) = 2e^{1456}$

$d(e^{234}) = 2e^{2345}$

$d(e^{235}) = (-2)e^{2356}$

$d(e^{236}) = (-2)e^{2356}$

$d(e^{245}) = 2e^{2456}$

$d(e^{246}) = (-2)e^{2456}$

Derivatives of $2-$forms

$d(e^{13}) = 2e^{135} + 2e^{136}$

$d(e^{14}) = 2e^{145} + (-2)e^{146}$

$d(e^{16}) = (-2)e^{156}$

$d(e^{23}) = (-2)e^{235} + 2e^{236}$

$d(e^{24}) = (-2)e^{245} + (-2)e^{246}$

$d(e^{26}) = 2e^{256}$

$d(e^{35}) = 2e^{356}$

$d(e^{45}) = (-2)e^{456}$

$d\Lambda d$ **of** $3-$**forms**

$d\Lambda d(e^{135}) = (-4)e^{135} + (-4)e^{136}$

$d\Lambda d(e^{136}) = 4e^{135} + 4e^{136}$

$d\Lambda d(e^{145}) = 4e^{145} + (-4)e^{146}$

$d\Lambda d(e^{146}) = 4e^{145} + (-4)e^{146}$

$d\Lambda d(e^{235}) = 4e^{235} + (-4)e^{236}$

$d\Lambda d(e^{236}) = 4e^{235} + (-4)e^{236}$

$d\Lambda d(e^{245}) = (-4)e^{245} + (-4)e^{246}$

$d\Lambda d(e^{246}) = 4e^{245} + 4e^{246}$