

Structure constants of the Lie Algebra:

$$(e^{23}, (-1)e^{36}, e^{26}, e^{26} + (-1)e^{56}, e^{36} + e^{46}, 0,).$$

Symplectic form

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

Derivatives of 3-forms

$$d(e^{124}) = (-1)e^{1256} + (-1)e^{1346}$$

$$d(e^{125}) = e^{1236} + e^{1246} + (-1)e^{1356}$$

$$d(e^{134}) = (-1)e^{1236} + e^{1246} + (-1)e^{1356}$$

$$d(e^{135}) = e^{1256} + e^{1346}$$

$$d(e^{145}) = e^{1256} + (-1)e^{1346} + e^{2345}$$

$$d(e^{146}) = e^{2346}$$

$$d(e^{156}) = e^{2356}$$

$$d(e^{234}) = (-1)e^{2356}$$

$$d(e^{235}) = e^{2346}$$

$$d(e^{245}) = (-1)e^{2346} + (-1)e^{3456}$$

$$d(e^{345}) = (-1)e^{2356} + e^{2456}$$

Derivatives of 2-forms

$$d(e^{12}) = e^{136}$$

$$d(e^{13}) = (-1)e^{126}$$

$$d(e^{14}) = (-1)e^{126} + e^{156} + e^{234}$$

$$d(e^{15}) = (-1)e^{136} + (-1)e^{146} + e^{235}$$

$$d(e^{16}) = e^{236}$$

$$d(e^{24}) = e^{256} + e^{346}$$

$$d(e^{25}) = (-1)e^{236} + (-1)e^{246} + e^{356}$$

$$d(e^{34}) = e^{236} + (-1)e^{246} + e^{356}$$

$$d(e^{35}) = (-1)e^{256} + (-1)e^{346}$$

$$d(e^{45}) = (-1)e^{256} + e^{346}$$

dΛd of 3–forms

$$d\Lambda d(e^{124}) = (-1.5)e^{236} + 2e^{246} + (-2)e^{356}$$

$$d\Lambda d(e^{125}) = 2e^{256} + 2e^{346}$$

$$d\Lambda d(e^{134}) = 2e^{256} + 2e^{346}$$

$$d\Lambda d(e^{135}) = 1.5e^{236} + (-2)e^{246} + 2e^{356}$$

$$d\Lambda d(e^{145}) = (-3)e^{236} + (-1.5)e^{246} + 1.5e^{356}$$

Structure constants of the Lie Algebra:

$$(e^{16} + e^{35}, (-1)e^{26} + e^{45}, e^{36}, (-1)e^{46}, 0, 0,).$$

Symplectic form

$$\omega = e^{14} + e^{23} + e^{56}$$

Derivatives of 3-forms

$$d(e^{123}) = e^{1236} + (-1)e^{1345}$$

$$d(e^{124}) = (-1)e^{1246} + (-1)e^{2345}$$

$$d(e^{126}) = (-1)e^{1456} + e^{2356}$$

$$d(e^{134}) = e^{1346}$$

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

$$d(e^{146}) = (-1)e^{3456}$$

$$d(e^{234}) = (-1)e^{2346}$$

$$d(e^{236}) = e^{3456}$$

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

Derivatives of 2-forms

$$d(e^{12}) = (-1)e^{145} + e^{235}$$

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

$$d(e^{14}) = (-1)e^{345}$$

$$d(e^{15}) = (-1)e^{156}$$

$$d(e^{16}) = e^{356}$$

$$d(e^{23}) = e^{345}$$

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

$$d(e^{25}) = e^{256}$$

$$d(e^{26}) = e^{456}$$

$$d(e^{35}) = (-1)e^{356}$$

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

$d\Lambda d$ of 3-forms

$$d\Lambda d(e^{126}) = 2e^{345}$$

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

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

Structure constants of the Lie Algebra:

$$(0, e^{35}, 0, 0.5e^{15}, 0, (-0.5)e^{13},).$$

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:

$$((-2)e^{15}, 2e^{25}, (-2)e^{36}, 2e^{46}, 0, 0,).$$

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

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

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

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

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

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

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

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

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

dΛd of 3-forms

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

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

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

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

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

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

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

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