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

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

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

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

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

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

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

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

$Ker(d^3) \supset \{e^{123},\ e^{125},\ e^{134},\ e^{135},\ e^{136},\ e^{145},\ e^{146},\ e^{156},\ e^{235},\ e^{236},\ e^{245},\ e^{345},\ e^{356},\ \}$

Derivatives of $2-$forms

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

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

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

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

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

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

$Ker(d^2) \supset \{e^{13},\ e^{14},\ e^{15},\ e^{16},\ e^{23},\ e^{25},\ e^{35},\ e^{36},\ e^{45},\ \}$

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

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

Primitive elements

$\omega \wedge e^{125} = e^{12345};\ \omega \wedge e^{345} = e^{12345};$

$\omega \wedge e^{126} = e^{12346};\ \omega \wedge e^{346} = e^{12346};$

$\omega \wedge e^{123} = e^{12356};\ \omega \wedge e^{356} = e^{12356};$

$\omega \wedge e^{124} = e^{12456};\ \omega \wedge e^{456} = e^{12456};$

$\omega \wedge e^{134} = e^{13456};\ \omega \wedge e^{156} = e^{13456};$

$\omega \wedge e^{234} = e^{23456};\ \omega \wedge e^{256} = e^{23456};$

$\omega \wedge e^{135} = \omega \wedge e^{136} = \omega \wedge e^{145} = \omega \wedge e^{146} = \omega \wedge e^{235} = \omega \wedge e^{236} = \omega \wedge e^{245} = \omega \wedge e^{246} = 0.$

Structure constants of the Lie Algebra:

$(0,\ 0,\ 0,\ e^{12},\ e^{13},\ e^{23})$

Symplectic form

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

Derivatives of $3-$forms

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

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

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

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

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

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

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

$Ker(d^3) \supset \{e^{123},\ e^{124},\ e^{125},\ e^{126},\ e^{134},\ e^{135},\ e^{136},\ e^{145},\ e^{234},\ e^{235},\ e^{236},\ e^{246},\ e^{356},\ \}$

Derivatives of $2-$forms

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

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

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

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

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

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

$Ker(d^2) \supset \{e^{12},\ e^{13},\ e^{14},\ e^{15},\ e^{23},\ e^{24},\ e^{26},\ e^{35},\ e^{36},\ \}$

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

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

Primitive elements

$\omega \wedge e^{125} = (-1)e^{12345}$;

$\omega \wedge e^{134} = e^{12345}$;

$\omega \wedge e^{234} = (-2)e^{12346}$;

$\omega \wedge e^{126} = (-1)e^{12346}$;

$\omega \wedge e^{235} = (-2)e^{12356}$;

$\omega \wedge e^{136} = (-1)e^{12356}$;

$\omega \wedge e^{245} = (-2)e^{12456}$;

$\omega \wedge e^{146} = (-1)e^{12456}$;

$\omega \wedge e^{345} = (-2)e^{13456}$;

$\omega \wedge e^{156} = (-1)e^{13456}$;

$\omega \wedge e^{256} = (-1)e^{23456}$;

$\omega \wedge e^{346} = e^{23456}$;

$\omega \wedge e^{123} = \omega \wedge e^{124} = \omega \wedge e^{135} = \omega \wedge e^{145} = \omega \wedge e^{236} = \omega \wedge e^{246} = \omega \wedge e^{356} = \omega \wedge e^{456} = 0$.

Structure constants of the Lie Algebra:

$(0,\ 0,\ 0,\ e^{15},\ 0,\ e^{13})$

Symplectic form

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

Derivatives of 3−forms

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

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

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

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

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

$Ker(d^3) \supset \{e^{123},\ e^{124},\ e^{125},\ e^{126},\ e^{134},\ e^{135},\ e^{136},\ e^{145},\ e^{146},\ e^{156},\ e^{235},\ e^{236},\ e^{245},\ e^{345},\ e^{356},\ \}$

Derivatives of 2−forms

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

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

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

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

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

$Ker(d^2) \supset \{e^{12},\ e^{13},\ e^{14},\ e^{15},\ e^{16},\ e^{23},\ e^{25},\ e^{35},\ e^{36},\ e^{45},\ \}$

$d\Lambda d$ of 3−forms

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

Primitive elements

$\omega \wedge e^{125} = e^{12345};\ \omega \wedge e^{345} = e^{12345};$

$\omega \wedge e^{126} = e^{12346};\ \omega \wedge e^{346} = e^{12346};$

$\omega \wedge e^{123} = e^{12356};\ \omega \wedge e^{356} = e^{12356};$

$\omega \wedge e^{124} = e^{12456};\ \omega \wedge e^{456} = e^{12456};$

$\omega \wedge e^{134} = e^{13456};\ \omega \wedge e^{156} = e^{13456};$

$\omega \wedge e^{234} = e^{23456};\ \omega \wedge e^{256} = e^{23456};$

$\omega \wedge e^{135} = \omega \wedge e^{136} = \omega \wedge e^{145} = \omega \wedge e^{146} = \omega \wedge e^{235} = \omega \wedge e^{236} = \omega \wedge e^{245} = \omega \wedge e^{246} = 0.$

Structure constants of the Lie Algebra:

$(0,\ 0,\ 0,\ 0,\ e^{12},\ e^{13})$

Symplectic form

$\omega = (-1)e^{14} + e^{26} + e^{35}$

Derivatives of 3−forms

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

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

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

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

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

$Ker(d^3) \supset \{e^{123},\ e^{124},\ e^{125},\ e^{126},\ e^{134},\ e^{135},\ e^{136},\ e^{145},\ e^{146},\ e^{156},\ e^{234},\ e^{235},\ e^{236},\ e^{245},\ e^{346},\ \}$

Derivatives of 2−forms

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

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

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

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

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

$Ker(d^2) \supset \{e^{12},\ e^{13},\ e^{14},\ e^{15},\ e^{16},\ e^{23},\ e^{24},\ e^{25},\ e^{34},\ e^{36},\ \}$

$d\Lambda d$ of 3−forms

$d(e^{456}) = (-2)e^{123}$

Primitive elements

$\omega \wedge e^{124} = (-1)e^{12345};\ \omega \wedge e^{235} = (-1)e^{12345};$

$\omega \wedge e^{236} = (-1)e^{12346};$

$\omega \wedge e^{134} = e^{12346};$

$\omega \wedge e^{126} = e^{12356};\ \omega \wedge e^{135} = e^{12356};$

$\omega \wedge e^{145} = e^{12456};\ \omega \wedge e^{256} = e^{12456};$

$\omega \wedge e^{146} = (-1)e^{13456};$

$\omega \wedge e^{356} = e^{13456};$

$\omega \wedge e^{246} = (-1)e^{23456}$; $\omega \wedge e^{345} = (-1)e^{23456}$;

$\omega \wedge e^{123} = \omega \wedge e^{125} = \omega \wedge e^{136} = \omega \wedge e^{156} = \omega \wedge e^{234} = \omega \wedge e^{245} = \omega \wedge e^{346} = \omega \wedge e^{456} = 0$.

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

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

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

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

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

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

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

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

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

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

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

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

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

$Ker(d^3) \supset \{e^{125},\ e^{126},\ e^{156},\ e^{256},\ e^{345},\ e^{346},\ e^{356},\ e^{456},\ \}$

Derivatives of $2-$forms

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

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

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

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

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

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

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

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

$Ker(d^2) \supset \{e^{12},\ e^{15},\ e^{25},\ e^{34},\ e^{36},\ e^{46},\ e^{56},\ \}$

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

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

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

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

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

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

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

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

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

Primitive elements

$\omega \wedge e^{125} = e^{12345};\ \omega \wedge e^{345} = e^{12345};$

$\omega \wedge e^{126} = e^{12346};\ \omega \wedge e^{346} = e^{12346};$

$\omega \wedge e^{123} = e^{12356};\ \omega \wedge e^{356} = e^{12356};$

$\omega \wedge e^{124} = e^{12456};\ \omega \wedge e^{456} = e^{12456};$

$\omega \wedge e^{134} = e^{13456};\ \omega \wedge e^{156} = e^{13456};$

$\omega \wedge e^{234} = e^{23456};\ \omega \wedge e^{256} = e^{23456};$

$\omega \wedge e^{135} = \omega \wedge e^{136} = \omega \wedge e^{145} = \omega \wedge e^{146} = \omega \wedge e^{235} = \omega \wedge e^{236} = \omega \wedge e^{245} = \omega \wedge e^{246} = 0.$