Structure constants of the Lie Algebra:

$(0,\ e^{35},\ 0,\ \lambda\ e^{15},\ 0,\ (-1+\lambda)e^{13})$

Symplectic form

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

Derivatives of $3-$forms

$d(e^{246}) = (1.0-\lambda)e^{1234} + \lambda\ e^{1256} + (-1.0)e^{3456}$

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

$d(e^{256}) = (1.0-\lambda)e^{1235}$

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

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

$d(e^{126}) = (-1.0)e^{1356}$

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

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

Derivatives of $2-$forms

$d(e^{26}) = (-1.0+\lambda)e^{123} + e^{356}$

$d(e^{24}) = \lambda\ e^{125} + (-1.0)e^{345}$

$d(e^{46}) = (1.0-\lambda)e^{134} + \lambda\ e^{156}$

$d(e^{12}) = (-1.0)e^{135}$

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

$d(e^{56}) = (1.0-\lambda)e^{135}$

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

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

$d\Lambda d(e^{246}) = (-1.0 + (1.0-\lambda)(-1+\lambda) - \lambda^2)e^{135}$

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:

$(0,\ (-1.0)e^{13} + ((2.0)\frac{\lambda}{1+\lambda^2})e^{35},\ 0,\ ((2.0)\frac{\lambda}{1+\lambda^2})e^{15},\ 0,\ (\frac{1}{1+\lambda^2})e^{35})$

Symplectic form

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

Derivatives of $3-$forms

$d(e^{126}) = (\frac{1}{1+\lambda^2})e^{1235} + (-(2.0)\frac{\lambda}{1+\lambda^2})e^{1356}$

$d(e^{234}) = ((2.0)\frac{\lambda}{1+\lambda^2})e^{1235}$

$d(e^{246}) = ((2.0)\frac{\lambda}{1+\lambda^2})e^{1256} + (-1.0)e^{1346} + (-\frac{1}{1+\lambda^2})e^{2345} + (-(2.0)\frac{\lambda}{1+\lambda^2})e^{3456}$

$d(e^{124}) = ((2.0)\frac{\lambda}{1+\lambda^2})e^{1345}$

$d(e^{146}) = (-\frac{1}{1+\lambda^2})e^{1345}$

$d(e^{245}) = (-1.0)e^{1345}$

$d(e^{256}) = (-1.0)e^{1356}$

$d(e^{346}) = ((2.0)\frac{\lambda}{1+\lambda^2})e^{1356}$

$Ker(d^3) \supset \{e^{123},\ e^{125},\ e^{134},\ e^{135},\ e^{136},\ e^{145},\ e^{156},\ e^{235},\ e^{236},\ e^{345},\ e^{356},\ e^{456},\ \}$

Derivatives of $2-$forms

$d(e^{24}) = ((2.0)\frac{\lambda}{1+\lambda^2})e^{125} + (-1.0)e^{134} + (-(2.0)\frac{\lambda}{1+\lambda^2})e^{345}$

$d(e^{12}) = (-(2.0)\frac{\lambda}{1+\lambda^2})e^{135}$

$d(e^{16}) = (-\frac{1}{1+\lambda^2})e^{135}$

$d(e^{25}) = (-1.0)e^{135}$

$d(e^{34}) = ((2.0)\frac{\lambda}{1+\lambda^2})e^{135}$

$d(e^{26}) = (-1.0)e^{136} + (-\frac{1}{1+\lambda^2})e^{235} + ((2.0)\frac{\lambda}{1+\lambda^2})e^{356}$

$d(e^{46}) = ((2.0)\frac{\lambda}{1+\lambda^2})e^{156} + (\frac{1}{1+\lambda^2})e^{345}$

$Ker(d^2) \supset \{e^{13},\ e^{14},\ e^{15},\ e^{23},\ e^{35},\ e^{36},\ e^{45},\ e^{56},\ \}$

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

$d\Lambda d(e^{246}) = (-(8.0)\frac{\lambda^2}{1+\lambda^{2}{}^2} + 2\frac{1}{1+\lambda^2})e^{135}$

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:

$(0,\ (-1.0)e^{13} + ((2.0)\frac{\lambda}{y})e^{35},\ 0,\ ((2.0)\frac{\lambda}{y})e^{15},\ 0,\ (\frac{1}{y})e^{35})$

Symplectic form

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

Derivatives of $3-$forms

$d(e^{126}) = (\frac{1}{y})e^{1235} + (-(2.0)\frac{\lambda}{y})e^{1356}$

$d(e^{234}) = ((2.0)\frac{\lambda}{y})e^{1235}$

$d(e^{246}) = ((2.0)\frac{\lambda}{y})e^{1256} + (-1.0)e^{1346} + (-\frac{1}{y})e^{2345} + (-(2.0)\frac{\lambda}{y})e^{3456}$

$d(e^{124}) = ((2.0)\frac{\lambda}{y})e^{1345}$

$d(e^{146}) = (-\frac{1}{y})e^{1345}$

$d(e^{245}) = (-1.0)e^{1345}$

$d(e^{256}) = (-1.0)e^{1356}$

$d(e^{346}) = ((2.0)\frac{\lambda}{y})e^{1356}$

$Ker(d^3) \supset \{e^{123},\ e^{125},\ e^{134},\ e^{135},\ e^{136},\ e^{145},\ e^{156},\ e^{235},\ e^{236},\ e^{345},\ e^{356},\ e^{456},\ \}$

Derivatives of $2-$forms

$d(e^{24}) = ((2.0)\frac{\lambda}{y})e^{125} + (-1.0)e^{134} + (-(2.0)\frac{\lambda}{y})e^{345}$

$d(e^{12}) = (-(2.0)\frac{\lambda}{y})e^{135}$

$d(e^{16}) = (-\frac{1}{y})e^{135}$

$d(e^{25}) = (-1.0)e^{135}$

$d(e^{34}) = ((2.0)\frac{\lambda}{y})e^{135}$

$d(e^{26}) = (-1.0)e^{136} + (-\frac{1}{y})e^{235} + ((2.0)\frac{\lambda}{y})e^{356}$

$d(e^{46}) = ((2.0)\frac{\lambda}{y})e^{156} + (\frac{1}{y})e^{345}$

$Ker(d^2) \supset \{e^{13},\ e^{14},\ e^{15},\ e^{23},\ e^{35},\ e^{36},\ e^{45},\ e^{56},\ \}$

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

$d\Lambda d(e^{246}) = (-(8.0)\frac{\lambda^2}{yy} + 2\frac{1}{y})e^{135}$

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:

$(0,\ (-1.0)e^{13} + e^{35},\ 0,\ e^{15},\ 0,\ 0.5\ e^{35})$

Symplectic form

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

Derivatives of $3-$forms

$d(e^{126}) = 0.5\ e^{1235} + (-1.0)e^{1356}$

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

$d(e^{246}) = e^{1256} + (-1.0)e^{1346} + (-0.5)e^{2345} + (-1.0)e^{3456}$

$d(e^{245}) = (-1.0)e^{1345}$

$d(e^{146}) = (-0.5)e^{1345}$

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

$d(e^{256}) = (-1.0)e^{1356}$

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

$Ker(d^3) \supset \{e^{123},\ e^{125},\ e^{134},\ e^{135},\ e^{136},\ e^{145},\ e^{156},\ e^{235},\ e^{236},\ e^{345},\ e^{356},\ e^{456},\ \}$

Derivatives of $2-$forms

$d(e^{24}) = e^{125} + (-1.0)e^{134} + (-1.0)e^{345}$

$d(e^{12}) = (-1.0)e^{135}$

$d(e^{25}) = (-1.0)e^{135}$

$d(e^{16}) = (-0.5)e^{135}$

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

$d(e^{26}) = (-1.0)e^{136} + (-0.5)e^{235} + e^{356}$

$d(e^{46}) = e^{156} + 0.5\ e^{345}$

$Ker(d^2) \supset \{e^{13},\ e^{14},\ e^{15},\ e^{23},\ e^{35},\ e^{36},\ e^{45},\ e^{56},\ \}$

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

$d\Lambda d(e^{246}) = (-1.0)e^{135}$

Primitive elements

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

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

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

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

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

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

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