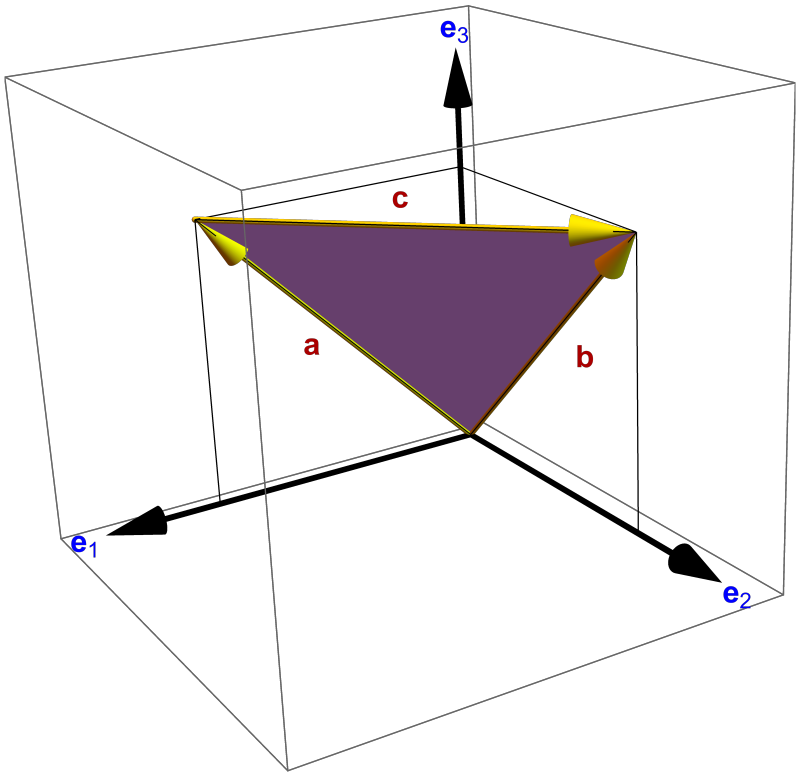
This is a figure that has an equilateral triangle in the corner of the first quadrant. This was used to illustrate that the product of two complex exponentials is another complex exponential (in R3), but the bivector argument for that resulting exponential describes (in general) a different plane.

```
<< peeters` ;
peeters`setGitDir[ "../project/figures/GAelectrodynamics" ]
```

```
/Users/pjoot/project/figures/GAelectrodynamics
```

```
ClearAll[o, e1, e2, e3, a, b, c, p, sq2]
o = {0, 0, 0};
{e1, e2, e3} = IdentityMatrix[3];
a = (e3 + e1) / Sqrt[2];
b = (e3 + e2) / Sqrt[2];
c = b - a;
sq2 = Sqrt[2];

ClearAll[bold, f14, esub];
bold = Style[#, Bold] &;
f14 = Style[#, FontSize → 16] &;
esub = Subscript[ "e" // bold , # ] &;
p = Graphics3D[{
    Polygon[{o, a, b}],
    Blue,
    Text[esub[1] // f14, 1.05 e1 ],
    Text[esub[2] // f14, 1.05 e2 ],
    Text[esub[3] // f14, 1.05 e3 ],
    Red // Darker,
    Text["a" // bold // f14, a / 2 - 0.1 Normalize[b + c]],
    Text["b" // bold // f14, b / 2 + 0.1 Normalize[c - a]],
    Text["c" // bold // f14, a + c / 2 + 0.1 Normalize[a + b]],
    Yellow,
    Arrowheads[0.07],
    Arrow[Tube[{o, a}, 0.007]],
    Arrow[Tube[{o, b}, 0.007]],
    Arrow[Tube[{a, b}, 0.007]],
    Black,
    Arrow[Tube[{o, e1}, 0.007]],
    Arrow[Tube[{o, e2}, 0.007]],
    Arrow[Tube[{o, e3}, 0.007]],
    Line[{e1 / sq2, a}],
    Line[{e3 / sq2, a}],
    Line[{e2 / sq2, b}],
    Line[{e3 / sq2, b}]
  }]
```




```
peeters`exportForLatex["exponentialVectorProductFig1", p]
```

{exponentialVectorProductFig1.eps, exponentialVectorProductFig1pn.png}

p =