

```
Exit[]
```

```
Cov = {{4.321334 * 10^-4, 2.365358 * 10^-05, -2.229046 * 10^-05},  
      {2.365358 * 10^-05, 1.150254 * 10^-04, -5.789410 * 10^-06},  
      {-2.229046 * 10^-05, -5.789410 * 10^-06, 1.313940 * 10^-05}};  
U = {0.008055, -0.0005592, 4.096 * 10^-5};
```

```
Cov // MatrixForm
```

```

$$\begin{pmatrix} 0.000432133 & 0.0000236536 & -0.0000222905 \\ 0.0000236536 & 1.15025 \times 10^{-4} & -5.78941 \times 10^{-6} \\ -0.0000222905 & -5.78941 \times 10^{-6} & 0.0000131394 \end{pmatrix}$$

```

```
CovI = Inverse[Cov]; Eins = {1, 1, 1};
```

```
L = Simplify[Inverse[{{U.CovI.U, U.CovI.Eins}, {Eins.CovI.U, Eins.CovI.Eins}}].{e, 1}];
```

```
x = Simplify[CovI.(L[[1]] * U + L[[2]] * Eins)];
```

```
sigma[ee_] := x.Cov.x /. e -> ee
```

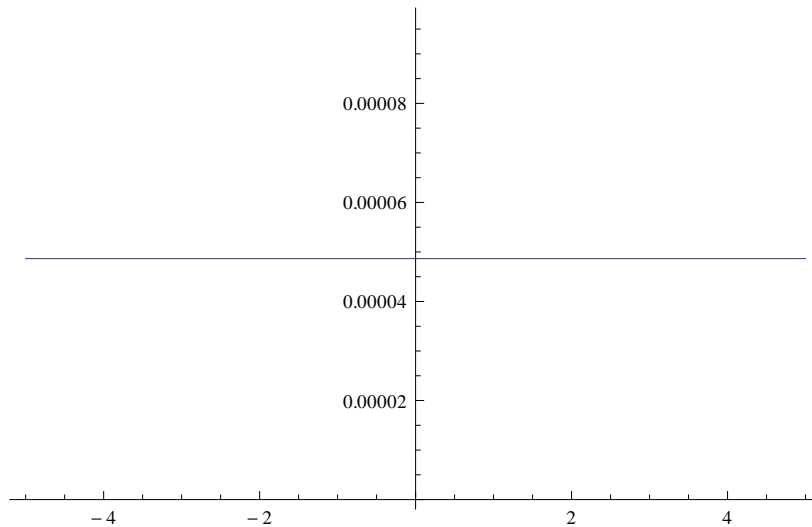
```
x[[3]]
```

```
0.648847 - 4.09842 * 10^-57 e
```

```
Expand[sigma[e]]
```

```
0.00004866 + 1.11956 * 10^-60 e + 8.22808 * 10^-117 e^2
```

```
Plot[sigma[e], {e, -5, 5}]
```



```
Simplify[x.U]
```

```
e
```

