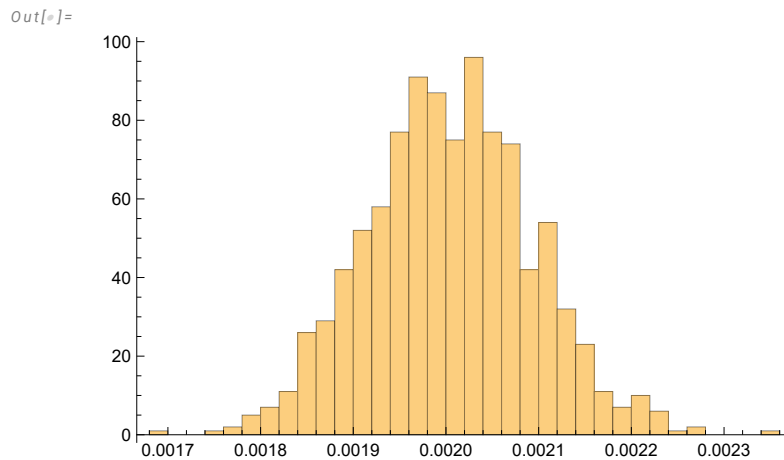

Variance of Variance within Large Normally Distributed Samples

```
In[ ]:= Table[Variance[Variance[RandomVariate[NormalDistribution[], {1000, 1000}]]], {1000}] //  
Histogram
```



```
In[ ]:= Table[Variance[Variance[RandomVariate[NormalDistribution[], {1000, 1000}]]], {1000}] //  
FindDistribution
```

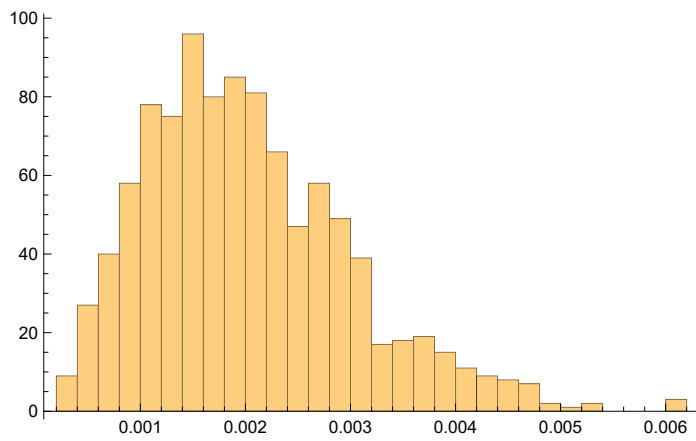
Out[]:=
NormalDistribution[0.00200357, 0.0000879336]

Variance of Variance within Small Normally Distributed Sample

Note that there is no stable value of the variance of variances within the small sample.

```
In[ ]:= Table[Variance[Variance[RandomVariate[NormalDistribution[], {1000, 10}]]], {1000}] //
Histogram
```

Out[]=



```
In[ ]:= Table[Variance[Variance[RandomVariate[NormalDistribution[], {1000, 10}]]], {1000}] //
FindDistribution
```

Out[]=

GammaDistribution[4.74135, 0.000428028]