In[1]:=
```
M = {{0.000529, 0.000179, 0.000451, 0.000536, 0.000028},
  {0.000179, 0.000400, -0.000104, 0.000466, -0.000192},
  {0.000451, -0.000104, 0.001369, -0.000373, 0.000755},
  {0.000536, 0.000466, -0.000373, 0.003969, -0.002948},
  {0.000028, -0.000192, 0.000755, -0.002948, 0.014400}}
```

Out[1]=
```
{{0.000529, 0.000179, 0.000451, 0.000536, 0.000028},
 {0.000179, 0.0004, -0.000104, 0.000466, -0.000192},
 {0.000451, -0.000104, 0.001369, -0.000373, 0.000755},
 {0.000536, 0.000466, -0.000373, 0.003969, -0.002948},
 {0.000028, -0.000192, 0.000755, -0.002948, 0.0144}}
```

In[2]:=
```
Det[M]
```

Out[2]= 4.53906×10^{-15}

In[4]:=
```
M1 = Eigenvalues[M]
```

Out[4]=
```
{0.0152317, 0.00335915, 0.0015266, 0.000406722, 0.000142878}
```