Proving manifolds are hyperbolic

This is a Jupyter notebook, which works similar to a Maple or Mathematica notebook.

In [1]:
```
import snappy
```

You can mix code and text, even with math(s): $\int_0^\infty x^{-2}\,dx$

In [2]:
```
len(snappy.HTLinkExteriors)
```

Out[2]:
```
180510
```

In [3]:
```
M = snappy.HTLinkExteriors.random()
```

In [4]:
```
M
```

Out[4]:
```
L14n11157(0,0)(0,0)
```

In [5]:
```
M.volume()
```

Out[5]:
```
18.0675611176150
```

In [6]:
```
M.solution_type()
```

Out[6]:
```
'all tetrahedra positively oriented'
```

In [7]:
```
M.verify_hyperbolicity()
```

Out[7]:
```
(True,
 [-0.0621537131329? + 1.0178073903282?*I,
  0.059774970118? + 0.9788539296551?*I,
  0.638466496795? + 1.441708925408?*I,
  0.2577526846089? + 0.6777228769149?*I,
  0.4689231434336? + 0.5089036951641?*I,
  0.6624603122241? + 1.3146266091150?*I,
  0.5818380652715? + 1.0991958451076?*I,
  0.2732769626431? + 0.3330550329362?*I,
  0.1249879363912? + 0.6734001962976?*I,
  0.5177383714016? + 0.2092928551311?*I,
  0.3815308239748? + 1.1424738781077?*I,
  0.958838864608? + 1.108858231676?*I,
  0.6613225634146? + 1.3500175082759?*I,
  0.3806174629844? + 0.7043673148659?*I,
  0.4366921328557? + 0.4496161851162?*I,
  0.1660936567574? + 0.8281267721153?*I,
  0.1748238444990? + 0.6968732647716?*I,
  0.7228861202326? + 0.4363507298890?*I,
  0.0848890117025? + 0.6343178679268?*I,
  1.037125892189? + 1.633085431964?*I])
```

In [8]:
```
M.volume(bits_prec=1000, verified=True)
```

Out[8]:
```
18.067561117614996141140898113333904364621775535584371953802539351396031201179315982332571025
528563923872419763728429410418133862221211515957662058175859688391579325423330766213891546051
561295450907015890061819191032271196660168616057899489132754513312836672915769612170503162138
24364154839739514 24?
```