

```

// First comes LungPhantom::Out(ostream &), below follows the phantom
definition.
////////////////////////////////////
////////////////////////////////////
//
/*
LungPhantom:
*****
Using the product T[L[S[B][S]][B[B][S]]][R[S[B][S]][B[B][S]]]
The following Branch objects are used:
Trachea:
-----
BranchAngle: 0ø
RotationAngle: 0ø
Length: 100mm
OuterRadius: 9mm
InnerRadius: 7.9mm
Scalefactor: 0.86

RightMainBronchus:
-----
BranchAngle: 55ø
RotationAngle: 180ø
Length: 50mm
OuterRadius: 7.5mm
InnerRadius: 6.4mm
Scalefactor: 0.86

LeftMainBronchus:
-----
BranchAngle: -55ø
RotationAngle: 0ø
Length: 40mm
OuterRadius: 6.5mm
InnerRadius: 5.4mm
Scalefactor: 0.86

BigSprout:
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BranchAngle: 25ø
RotationAngle: 90ø
Length: 50mm
OuterRadius: 8.5mm
InnerRadius: 7.4mm
Scalefactor: 0.86

SmallSprout:
-----
BranchAngle: -45ø
RotationAngle: 10ø
Length: 40mm
OuterRadius: 7mm
InnerRadius: 5.9mm
Scalefactor: 0.86

The wire (!) model of the lung lies in the bounding box [-95.0418, 87.9971]
X [-17.9904, 17.9904] X [0, 181.651] mm^3
The box dimensions are 183.039 * 35.9808 * 181.651 mm^3

Now come the branches:

// Object 1:
Trachea:
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Generation: 0
Scale: 1
Lenght: 100 mm
OuterRadius: 9 mm
InnerRadius: 7.9 mm
u = (0, 0, 0) mm, |u| = 0 mm // Start point
v = (0, 0, 100) mm, |v| = 100 mm // End point
x = (1, 0, 0) mm, |x| = 1 mm // Defines the branch plane together
with z
y = (0, 1, 0) mm, |y| = 1 mm // New branches will be rotated about
y
z = (0, 0, 1) mm, |z| = 1 mm // Direction of branch

```

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// Object 2:
LeftMainBronchus:
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Generation: 1
Scale: 0.86
Lenght: 34.4 mm
OuterRadius: 5.59 mm
InnerRadius: 4.644 mm
u = (0, 0, 100) mm, |u| = 100 mm // Start point
v = (28.1788, 0, 119.731) mm, |v| = 123.002 mm // End point
x = (0.573576, 0, -0.819152) mm, |x| = 1 mm // Defines the branch
plane together with z
y = (0, 1, 0) mm, |y| = 1 mm // New branches will be rotated about
y
z = (0.819152, 0, 0.573576) mm, |z| = 1 mm // Direction of branch

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// Object 3:
SmallSprout:
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Generation: 2
Scale: 0.7396
Lenght: 29.584 mm
OuterRadius: 5.1772 mm
InnerRadius: 4.36364 mm
u = (28.1788, 0, 119.731) mm, |u| = 123.002 mm // Start point
v = (57.3134, 0, 114.594) mm, |v| = 128.127 mm // End point
x = (-0.17101, 0.173648, -0.969846) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (0.0301537, 0.984808, 0.17101) mm, |y| = 1 mm // New branches
will be rotated about y
z = (0.984808, 0, -0.173648) mm, |z| = 1 mm // Direction of branch

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// Object 4:
BigSprout:
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Generation: 3
Scale: 0.636056
Lenght: 31.8028 mm
OuterRadius: 5.40648 mm
InnerRadius: 4.70681 mm
u = (57.3134, 0, 114.594) mm, |u| = 128.127 mm // Start point
v = (87.9971, -2.33391, 122.624) mm, |v| = 150.949 mm // End point
x = (0.0301537, 0.984808, 0.17101) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (-0.26121, -0.157379, 0.952366) mm, |y| = 1 mm // New branches
will be rotated about y

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```
z = (0.964811, -0.0733869, 0.252496) mm, |z| = 1 mm // Direction of
branch
```

```
// Object 5:
SmallSprout:
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```

```
Generation: 3
Scale: 0.636056
Lenght: 25.4422 mm
OuterRadius: 4.45239 mm
InnerRadius: 3.75273 mm
u = (57.3134, 0, 114.594) mm, |u| = 128.127 mm // Start point
v = (71.9539, 3.124, 94.0219) mm, |v| = 118.437 mm // End point
x = (-0.799634, 0.291932, -0.524748) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (0.171616, 0.948524, 0.266175) mm, |y| = 1 mm // New branches
will be rotated about y
z = (0.575442, 0.122788, -0.808573) mm, |z| = 1 mm // Direction of
branch
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// Object 6:
BigSprout:
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```
Generation: 2
Scale: 0.7396
Lenght: 36.98 mm
OuterRadius: 6.2866 mm
InnerRadius: 5.47304 mm
u = (28.1788, 0, 119.731) mm, |u| = 123.002 mm // Start point
v = (46.6688, 0, 151.757) mm, |v| = 158.77 mm // End point
x = (5.3027e-17, 1, -3.06152e-17) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (-0.866025, 6.12303e-17, 0.5) mm, |y| = 1 mm // New branches
will be rotated about y
z = (0.5, 0, 0.866025) mm, |z| = 1 mm // Direction of branch
```

```
// Object 7:
BigSprout:
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```
Generation: 3
Scale: 0.636056
Lenght: 31.8028 mm
OuterRadius: 5.40648 mm
InnerRadius: 4.70681 mm
u = (46.6688, 0, 151.757) mm, |u| = 158.77 mm // Start point
v = (61.0804, -13.4404, 176.718) mm, |v| = 187.459 mm // End point
x = (-0.866025, 1.16724e-16, 0.5) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (-0.211309, -0.906308, -0.365998) mm, |y| = 1 mm // New
branches will be rotated about y
z = (0.453154, -0.422618, 0.784886) mm, |z| = 1 mm // Direction of
branch
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// Object 8:
SmallSprout:
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```
Generation: 3
Scale: 0.636056
Lenght: 25.4422 mm
```

```

OuterRadius: 4.45239 mm
InnerRadius: 3.75273 mm
u = (46.6688, 0, 151.757) mm, |u| = 158.77 mm // Start point
v = (55.664, 17.9904, 167.337) mm, |v| = 177.267 mm // End point
x = (-0.498566, 0.696364, -0.516245) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (-0.791475, -0.122788, 0.598741) mm, |y| = 1 mm // New branches
will be rotated about y
z = (0.353553, 0.707107, 0.612372) mm, |z| = 1 mm // Direction of
branch

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// Object 9:
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RightMainBronchus:
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Generation: 1
Scale: 0.86
Lenght: 43 mm
OuterRadius: 6.45 mm
InnerRadius: 5.504 mm
u = (0, 0, 100) mm, |u| = 100 mm // Start point
v = (-35.2235, 0, 124.664) mm, |v| = 129.544 mm // End point
x = (-0.573576, 1.22461e-16, -0.819152) mm, |x| = 1 mm // Defines
the branch plane together with z
y = (-7.02405e-17, -1, -1.00314e-16) mm, |y| = 1 mm // New branches
will be rotated about y
z = (-0.819152, 0, 0.573576) mm, |z| = 1 mm // Direction of branch

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// Object 10:
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SmallSprout:
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Generation: 2
Scale: 0.7396
Lenght: 29.584 mm
OuterRadius: 5.1772 mm
InnerRadius: 4.36364 mm
u = (-35.2235, 0, 124.664) mm, |u| = 129.544 mm // Start point
v = (-64.3581, 2.56176e-15, 119.527) mm, |v| = 135.752 mm // End
point
x = (0.17101, -0.173648, -0.969846) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (-0.0301537, -0.984808, 0.17101) mm, |y| = 1 mm // New branches
will be rotated about y
z = (-0.984808, 8.65927e-17, -0.173648) mm, |z| = 1 mm // Direction
of branch

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// Object 11:
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BigSprout:
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```

Generation: 3
Scale: 0.636056
Lenght: 31.8028 mm
OuterRadius: 5.40648 mm
InnerRadius: 4.70681 mm
u = (-64.3581, 2.56176e-15, 119.527) mm, |u| = 135.752 mm // Start
point
v = (-95.0418, 2.33391, 127.557) mm, |v| = 159.088 mm // End point
x = (-0.0301537, -0.984808, 0.17101) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (0.26121, 0.157379, 0.952366) mm, |y| = 1 mm // New branches
will be rotated about y

```

```
z = (-0.964811, 0.0733869, 0.252496) mm, |z| = 1 mm // Direction of
branch
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```
// Object 12:
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SmallSprout:
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```
Generation: 3
```

```
Scale: 0.636056
```

```
Lenght: 25.4422 mm
```

```
OuterRadius: 4.45239 mm
```

```
InnerRadius: 3.75273 mm
```

```
u = (-64.3581, 2.56176e-15, 119.527) mm, |u| = 135.752 mm // Start
point
```

```
v = (-78.9986, -3.124, 98.9547) mm, |v| = 126.659 mm // End point
```

```
x = (0.799634, -0.291932, -0.524748) mm, |x| = 1 mm // Defines the
branch plane together with z
```

```
y = (-0.171616, -0.948524, 0.266175) mm, |y| = 1 mm // New branches
will be rotated about y
```

```
z = (-0.575442, -0.122788, -0.808573) mm, |z| = 1 mm // Direction
of branch
```

```
// Object 13:
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```
BigSprout:
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```

```
Generation: 2
```

```
Scale: 0.7396
```

```
Lenght: 36.98 mm
```

```
OuterRadius: 6.2866 mm
```

```
InnerRadius: 5.47304 mm
```

```
u = (-35.2235, 0, 124.664) mm, |u| = 129.544 mm // Start point
```

```
v = (-53.7135, -1.91387e-15, 156.689) mm, |v| = 165.64 mm // End
point
```

```
x = (-1.23268e-16, -1, -1.30929e-16) mm, |x| = 1 mm // Defines the
branch plane together with z
```

```
y = (0.866025, -1.72217e-16, 0.5) mm, |y| = 1 mm // New branches
will be rotated about y
```

```
z = (-0.5, -5.17541e-17, 0.866025) mm, |z| = 1 mm // Direction of
branch
```

```
// Object 14:
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```
BigSprout:
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```

```
Generation: 3
```

```
Scale: 0.636056
```

```
Lenght: 31.8028 mm
```

```
OuterRadius: 5.40648 mm
```

```
InnerRadius: 4.70681 mm
```

```
u = (-53.7135, -1.91387e-15, 156.689) mm, |u| = 165.64 mm // Start
point
```

```
v = (-68.1251, 13.4404, 181.651) mm, |v| = 194.47 mm // End point
```

```
x = (0.866025, -2.27711e-16, 0.5) mm, |x| = 1 mm // Defines the
branch plane together with z
```

```
y = (0.211309, 0.906308, -0.365998) mm, |y| = 1 mm // New branches
will be rotated about y
```

```
z = (-0.453154, 0.422618, 0.784886) mm, |z| = 1 mm // Direction of
branch
```

```
// Object 15:
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```
SmallSprout:
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```

-----
Generation: 3
Scale: 0.636056
Lenght: 25.4422 mm
OuterRadius: 4.45239 mm
InnerRadius: 3.75273 mm
u = (-53.7135, -1.91387e-15, 156.689) mm, |u| = 165.64 mm // Start
point
v = (-62.7087, -17.9904, 172.27) mm, |v| = 184.209 mm // End point
x = (0.498566, -0.696364, -0.516245) mm, |x| = 1 mm // Defines the
branch plane together with z
y = (0.791475, 0.122788, 0.598741) mm, |y| = 1 mm // New branches
will be rotated about y
z = (-0.353553, -0.707107, 0.612372) mm, |z| = 1 mm // Direction of
branch

*/
////////////////////////////////////
////////////////////////////////////

#define OUTERRHO 1.0
#define INNERRHO 0.1
#define RELEVANCE relevance

Phantom

// Number of Detectors: 128
// Number of Pixels: 512^2

// Detector spacing: 1.41915mm
// PixelWidth: 0.357498mm

// Outer Objects (a total of 15 cylinders and 15 spheres)

// Object 1:
// "Trachea", Generation 0, Scale 1
{[Cylinder: x=0mm y=0mm z=50mm l=100mm r=9mm axis(0mm, 0mm, 1mm)]
rho=OUTERRHO RELEVANCE}
{[Sphere: x=0mm y=0mm z=100mm r=9mm] rho=OUTERRHO RELEVANCE}

// Object 2:
// "LeftMainBronchus", Generation 1, Scale 0.86
{[Cylinder: x=14.0894mm y=0mm z=109.866mm l=34.4mm r=5.59mm
axis(0.819152mm, 0mm, 0.573576mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=28.1788mm y=0mm z=119.731mm r=5.59mm] rho=OUTERRHO RELEVANCE}

// Object 3:
// "SmallSprout", Generation 2, Scale 0.7396
{[Cylinder: x=42.7461mm y=0mm z=117.162mm l=29.584mm r=5.1772mm
axis(0.984808mm, 0mm, -0.173648mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=57.3134mm y=0mm z=114.594mm r=5.1772mm] rho=OUTERRHO RELEVANCE}

// Object 4:
// "BigSprout", Generation 3, Scale 0.636056
{[Cylinder: x=72.6552mm y=-1.16695mm z=118.609mm l=31.8028mm r=5.40648mm
axis(0.964811mm, -0.0733869mm, 0.252496mm)] rho=OUTERRHO RELEVANCE}

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{[Sphere: x=87.9971mm y=-2.33391mm z=122.624mm r=5.40648mm] rho=OUTERRHO
RELEVANCE}

// Object 5:
// "SmallSprout", Generation 3, Scale 0.636056
{[Cylinder: x=64.6336mm y=1.562mm z=104.308mm l=25.4422mm r=4.45239mm
axis(0.575442mm, 0.122788mm, -0.808573mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=71.9539mm y=3.124mm z=94.0219mm r=4.45239mm] rho=OUTERRHO
RELEVANCE}

// Object 6:
// "BigSprout", Generation 2, Scale 0.7396
{[Cylinder: x=37.4238mm y=0mm z=135.744mm l=36.98mm r=6.2866mm axis(0.5mm,
0mm, 0.866025mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=46.6688mm y=0mm z=151.757mm r=6.2866mm] rho=OUTERRHO RELEVANCE}

// Object 7:
// "BigSprout", Generation 3, Scale 0.636056
{[Cylinder: x=53.8746mm y=-6.72022mm z=164.237mm l=31.8028mm r=5.40648mm
axis(0.453154mm, -0.422618mm, 0.784886mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=61.0804mm y=-13.4404mm z=176.718mm r=5.40648mm] rho=OUTERRHO
RELEVANCE}

// Object 8:
// "SmallSprout", Generation 3, Scale 0.636056
{[Cylinder: x=51.1664mm y=8.99519mm z=159.547mm l=25.4422mm r=4.45239mm
axis(0.353553mm, 0.707107mm, 0.612372mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=55.664mm y=17.9904mm z=167.337mm r=4.45239mm] rho=OUTERRHO
RELEVANCE}

// Object 9:
// "RightMainBronchus", Generation 1, Scale 0.86
{[Cylinder: x=-17.6118mm y=0mm z=112.332mm l=43mm r=6.45mm axis(-
0.819152mm, 0mm, 0.573576mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=-35.2235mm y=0mm z=124.664mm r=6.45mm] rho=OUTERRHO RELEVANCE}

// Object 10:
// "SmallSprout", Generation 2, Scale 0.7396
{[Cylinder: x=-49.7908mm y=1.28088e-15mm z=122.095mm l=29.584mm r=5.1772mm
axis(-0.984808mm, 8.65927e-17mm, -0.173648mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=-64.3581mm y=2.56176e-15mm z=119.527mm r=5.1772mm] rho=OUTERRHO
RELEVANCE}

// Object 11:
// "BigSprout", Generation 3, Scale 0.636056
{[Cylinder: x=-79.6999mm y=1.16695mm z=123.542mm l=31.8028mm r=5.40648mm
axis(-0.964811mm, 0.0733869mm, 0.252496mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=-95.0418mm y=2.33391mm z=127.557mm r=5.40648mm] rho=OUTERRHO
RELEVANCE}

// Object 12:
// "SmallSprout", Generation 3, Scale 0.636056
{[Cylinder: x=-71.6784mm y=-1.562mm z=109.241mm l=25.4422mm r=4.45239mm
axis(-0.575442mm, -0.122788mm, -0.808573mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=-78.9986mm y=-3.124mm z=98.9547mm r=4.45239mm] rho=OUTERRHO
RELEVANCE}

// Object 13:
// "BigSprout", Generation 2, Scale 0.7396
{[Cylinder: x=-44.4685mm y=-9.56933e-16mm z=140.677mm l=36.98mm r=6.2866mm
axis(-0.5mm, -5.17541e-17mm, 0.866025mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=-53.7135mm y=-1.91387e-15mm z=156.689mm r=6.2866mm]
rho=OUTERRHO RELEVANCE}

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// Object 14:
// "BigSprout", Generation 3, Scale 0.636056
{[Cylinder: x=-60.9193mm y=6.72022mm z=169.17mm l=31.8028mm r=5.40648mm
axis(-0.453154mm, 0.422618mm, 0.784886mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=-68.1251mm y=13.4404mm z=181.651mm r=5.40648mm] rho=OUTERRHO
RELEVANCE}

// Object 15:
// "SmallSprout", Generation 3, Scale 0.636056
{[Cylinder: x=-58.2111mm y=-8.99519mm z=164.479mm l=25.4422mm r=4.45239mm
axis(-0.353553mm, -0.707107mm, 0.612372mm)] rho=OUTERRHO RELEVANCE}
{[Sphere: x=-62.7087mm y=-17.9904mm z=172.27mm r=4.45239mm] rho=OUTERRHO
RELEVANCE}

// Inner Objects (a total of 15 cylinders and 15 spheres)

// Object 1:
// "Trachea", Generation 0, Scale 1
{[Cylinder: x=0mm y=0mm z=50mm l=100mm r=7.9mm axis(0mm, 0mm, 1mm)]
rho=INNERRHO RELEVANCE}
{[Sphere: x=0mm y=0mm z=100mm r=7.9mm] rho=INNERRHO RELEVANCE}

// Object 2:
// "LeftMainBronchus", Generation 1, Scale 0.86
{[Cylinder: x=14.0894mm y=0mm z=109.866mm l=34.4mm r=4.644mm
axis(0.819152mm, 0mm, 0.573576mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=28.1788mm y=0mm z=119.731mm r=4.644mm] rho=INNERRHO RELEVANCE}

// Object 3:
// "SmallSprout", Generation 2, Scale 0.7396
{[Cylinder: x=42.7461mm y=0mm z=117.162mm l=29.584mm r=4.36364mm
axis(0.984808mm, 0mm, -0.173648mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=57.3134mm y=0mm z=114.594mm r=4.36364mm] rho=INNERRHO
RELEVANCE}

// Object 4:
// "BigSprout", Generation 3, Scale 0.636056
{[Cylinder: x=72.6552mm y=-1.16695mm z=118.609mm l=31.8028mm r=4.70681mm
axis(0.964811mm, -0.0733869mm, 0.252496mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=87.9971mm y=-2.33391mm z=122.624mm r=4.70681mm] rho=INNERRHO
RELEVANCE}

// Object 5:
// "SmallSprout", Generation 3, Scale 0.636056
{[Cylinder: x=64.6336mm y=1.562mm z=104.308mm l=25.4422mm r=3.75273mm
axis(0.575442mm, 0.122788mm, -0.808573mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=71.9539mm y=3.124mm z=94.0219mm r=3.75273mm] rho=INNERRHO
RELEVANCE}

// Object 6:
// "BigSprout", Generation 2, Scale 0.7396
{[Cylinder: x=37.4238mm y=0mm z=135.744mm l=36.98mm r=5.47304mm axis(0.5mm,
0mm, 0.866025mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=46.6688mm y=0mm z=151.757mm r=5.47304mm] rho=INNERRHO
RELEVANCE}

// Object 7:
// "BigSprout", Generation 3, Scale 0.636056

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{[Cylinder: x=53.8746mm y=-6.72022mm z=164.237mm l=31.8028mm r=4.70681mm
axis(0.453154mm, -0.422618mm, 0.784886mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=61.0804mm y=-13.4404mm z=176.718mm r=4.70681mm] rho=INNERRHO
RELEVANCE}

// Object 8:
// "SmallSprout", Generation 3, Scale 0.636056
{[Cylinder: x=51.1664mm y=8.99519mm z=159.547mm l=25.4422mm r=3.75273mm
axis(0.353553mm, 0.707107mm, 0.612372mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=55.664mm y=17.9904mm z=167.337mm r=3.75273mm] rho=INNERRHO
RELEVANCE}

// Object 9:
// "RightMainBronchus", Generation 1, Scale 0.86
{[Cylinder: x=-17.6118mm y=0mm z=112.332mm l=43mm r=5.504mm axis(-
0.819152mm, 0mm, 0.573576mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=-35.2235mm y=0mm z=124.664mm r=5.504mm] rho=INNERRHO RELEVANCE}

// Object 10:
// "SmallSprout", Generation 2, Scale 0.7396
{[Cylinder: x=-49.7908mm y=1.28088e-15mm z=122.095mm l=29.584mm r=4.36364mm
axis(-0.984808mm, 8.65927e-17mm, -0.173648mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=-64.3581mm y=2.56176e-15mm z=119.527mm r=4.36364mm]
rho=INNERRHO RELEVANCE}

// Object 11:
// "BigSprout", Generation 3, Scale 0.636056
{[Cylinder: x=-79.6999mm y=1.16695mm z=123.542mm l=31.8028mm r=4.70681mm
axis(-0.964811mm, 0.0733869mm, 0.252496mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=-95.0418mm y=2.33391mm z=127.557mm r=4.70681mm] rho=INNERRHO
RELEVANCE}

// Object 12:
// "SmallSprout", Generation 3, Scale 0.636056
{[Cylinder: x=-71.6784mm y=-1.562mm z=109.241mm l=25.4422mm r=3.75273mm
axis(-0.575442mm, -0.122788mm, -0.808573mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=-78.9986mm y=-3.124mm z=98.9547mm r=3.75273mm] rho=INNERRHO
RELEVANCE}

// Object 13:
// "BigSprout", Generation 2, Scale 0.7396
{[Cylinder: x=-44.4685mm y=-9.56933e-16mm z=140.677mm l=36.98mm r=5.47304mm
axis(-0.5mm, -5.17541e-17mm, 0.866025mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=-53.7135mm y=-1.91387e-15mm z=156.689mm r=5.47304mm]
rho=INNERRHO RELEVANCE}

// Object 14:
// "BigSprout", Generation 3, Scale 0.636056
{[Cylinder: x=-60.9193mm y=6.72022mm z=169.17mm l=31.8028mm r=4.70681mm
axis(-0.453154mm, 0.422618mm, 0.784886mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=-68.1251mm y=13.4404mm z=181.651mm r=4.70681mm] rho=INNERRHO
RELEVANCE}

// Object 15:
// "SmallSprout", Generation 3, Scale 0.636056
{[Cylinder: x=-58.2111mm y=-8.99519mm z=164.479mm l=25.4422mm r=3.75273mm
axis(-0.353553mm, -0.707107mm, 0.612372mm)] rho=INNERRHO RELEVANCE}
{[Sphere: x=-62.7087mm y=-17.9904mm z=172.27mm r=3.75273mm] rho=INNERRHO
RELEVANCE}

```



```
Detector{[Plane_xy: x=-3.52235mm y=-1.77636e-15mm z=175.974mm] x1=-  
91.5194mm x2=91.5194mm nx=512 y1=-91.5194mm y2=91.5194mm ny=512}  
Detector{[Plane_xy: x=-3.52235mm y=-1.77636e-15mm z=177.394mm] x1=-  
91.5194mm x2=91.5194mm nx=512 y1=-91.5194mm y2=91.5194mm ny=512}  
Detector{[Plane_xy: x=-3.52235mm y=-1.77636e-15mm z=178.813mm] x1=-  
91.5194mm x2=91.5194mm nx=512 y1=-91.5194mm y2=91.5194mm ny=512}  
Detector{[Plane_xy: x=-3.52235mm y=-1.77636e-15mm z=180.232mm] x1=-  
91.5194mm x2=91.5194mm nx=512 y1=-91.5194mm y2=91.5194mm ny=512}
```