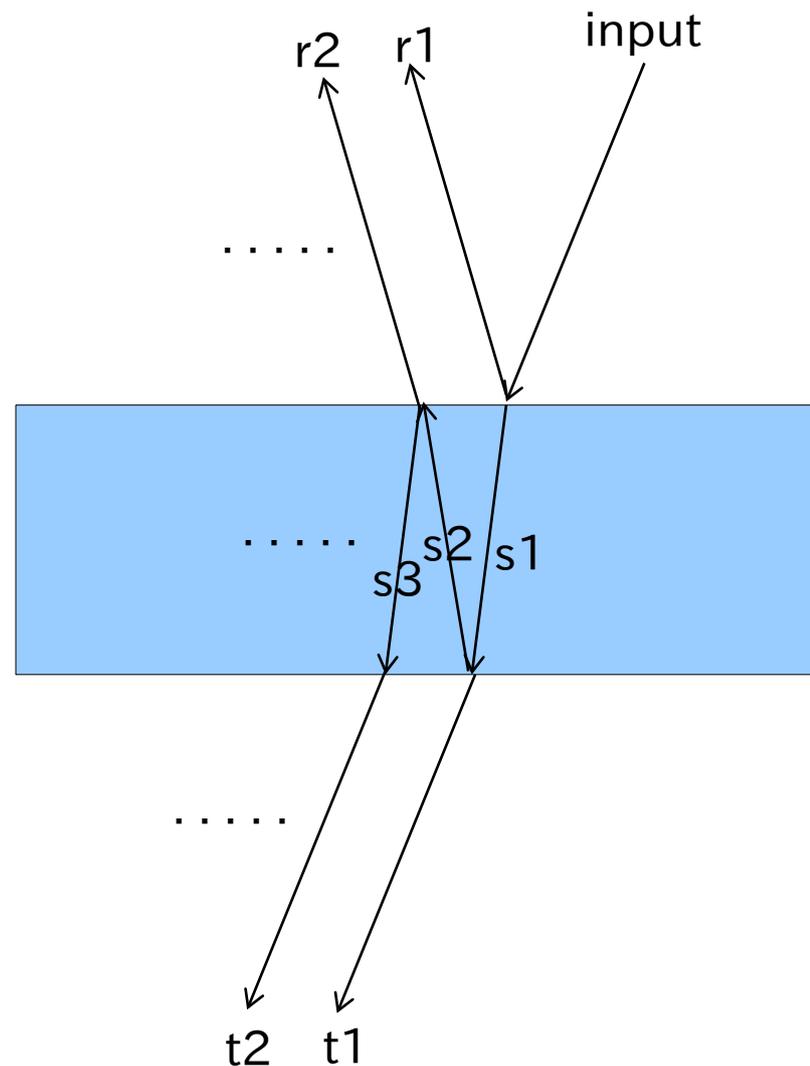


Interaction of a beam with a mirror

Mirror.hitFromHR(beam): This function generates a dictionary of beam objects. The resultant dictionary contains reflected & deflected beams. The names of the beams are shown below.

input: A copy of the beam object given to hitFromHR() function with the length set to the distance between the pos of the beam to the point where the beam hit the mirror.



Specifying Directions

In gtrace, there are many occasions where a direction has to be specified. Examples are, beam propagation direction and mirror surface normal.

A direction can be specified in two ways: a direction angle and a 2D vector. In most cases, you can use either way. For example, a GaussianBeam object holds its propagation direction in two attributes: `beam.dirVect` and `beam.dirAngle`. If you change one of those, e.g. `beam.dirAngle = pi`, the other will be updated automatically, i.e. `beam.dirVect` becomes `[0,1]`. This functionality is provided by the `HasTraits` class, which is the parent class of all the classes in gtrace.

`dirAngle` is measured counter clock-wise from the positive x-axis.

