

The axis are defined by the initial rays position. It is defined as

### **Fresnel Propagator Transfer Function**

There are two different solvers, depending if the parameter  $m$  is explicited.  $m$  sets the size of the grid

$$m = \frac{\delta_2}{\delta_1} \quad (1)$$

### **Refractive index of a dispersive medium**

Refractive index is calculated with the Sellmeier formula,

$$n^2(\lambda) = 1 + \sum_i \frac{B_i \lambda^2}{\lambda^2 - C_i} \quad (2)$$

implemented until the third order of the summarization. Sellmeier coefficients are tabulated in but can be retrieved elsewhere in literature.

The Sellmeier equation is implemented in the function `Sellmeier()`

For not-implemented materials, it is possible to use the "custom" material whose coefficients can be declared launching the Sellmeier function.

Listing 1: Un codice in display.

```
for i:=maxint to 0
do begin { non far nulla }
end;
write( Benvenuto in Pascal. );
```