
Subject: Re: Group velocity for Cherenkov photon propagation in G3/G4
Posted by [Stefano Spataro](#) on Wed, 26 Jan 2011 11:41:43 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi,

as far as I know, for optically active materials you define in your media_pnd.geo the refraction index for each wavelength (in the media file as photon momentum). Then G3 and G4 should use $v = c/n$. Just guessing, I think there is no group velocity but just the propagation of each single photon.

You could, inside your PndDrc::ProcessHits, store at entrance and at the exiting point the position and the time of the cherenkov photon, therefore easily calculate the velocity and compare it with the foreseen value.

Hope it helps somehow.
