Subject: Re: Lateral surface of elliptic cone
Posted by pgrigis on Tue, 12 Apr 2011 20:16:18 GMT

Unfortunately, that depends on the length of the perimeter
of the ellipse, which can't be computed with elementary
functions. However the elliptical integrals are not too hard
to deal with and presumably can be approximated easily enough...

A formula is given here:
http://mathworld.wolfram.com/EllipticCone.html

Ciao,
Paolo

On Apr 12, 3:33 pm, Michael Gilichinsky <gilichin...@gmail.com> wrote:
> Hello group, I would like to create right centered (not oblique) cone
> that has an elliptical base and calculate its lateral surface area. Is
> there an analytical solution or must it be approximated?
>
> I suppose that MESH_OBJ is the starting point but maybe you have
> better ideas...
>
> Cheers

Subject: Re: Lateral surface of elliptic cone
Posted by MMMisha[1] on Tue, 12 Apr 2011 21:18:29 GMT

Thanks, Paolo

As I see it now, the calculation of lateral surface area is quite
simple (I used IMSL_ELE - elliptic integral of the second kind). But
how I can create the cone with elliptic base in IDL? MESH_OBJ seems to
work with surfaces of revolution... or am I wrong?

Cheers

M.

On Apr 12, 10:16 pm, Paolo <pgri...@gmail.com> wrote:
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