Subject: Plotting streamlines in 3D

Posted by mark.t.douglas on Tue, 25 Jan 2005 14:14:24 GMT

I can plot streamlines (well, magnetic field lines, but anyway) in 2D
easily enough but getting them to plot in 3D is a task that is filling
me with a terrible rage - I just can't get it working! plots() doesn't
seem suited to the task and I really can't figure out how streamline()
or particle_trace() or anything like that works. I tried googling for
help but all I got were 404s because it seems the last time anyone
tried plotting streamlines in 3d and getting stuck doing so was in
2001.

Anyone able to help? The field is analytic so I can get the field at
any point easily enough (field(x,y,z) returns a three-element vector)
and I can trace the field lines starting from any point too
(trace(x,y,z,ds) returns a 3xN array consisting of the x,y and z coords
of the nth point along it, with a stepsize ds) but plotting them in 3D
is driving me mad!

TIA internet!