Subject: Re: equally spaced points on a hypersphere? Posted by Craig Markwardt on Fri, 29 Oct 2004 16:40:11 GMT

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Matt Feinstein <nospam@here.com> writes:

>

- > I think that if 'equidistant' means that each point has the same
- > relation to -every- neighboring point, then it implies that the points
- > lie on a regular polyhedron.

Hmm, but consider a soccer ball (truncated icosahedron). The faces are not all regular, and yet the nearest neighbors are all equidistant, no?

- > In any case, a lowest energy
- > configuration may only be a local minimum with respect to small
- > variations of the positions of the points, so the global properties of
- > such a minimum are not necessarily unique.

I think if one uses a 1/r^2 potential, then there is a single global minimum. I guess it's possible for the iterator program to get stuck elsewhere.

Craig	
<del></del>	
Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives   Remove "net" for better response	