
Subject: Re: Repost of Vertex question...

Posted by [Struan Gray](#) on Mon, 02 Jul 2001 11:05:27 GMT

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Craig Markwardt, craigmnet@cow.physics.wisc.edu writes:

> Cool ideas!

Quasicrystals are cool things. Back when I were a nipper looking at options for a thesis project they were one of the things that persuaded me that Solid state physics could compete with Astronomy when it came to beauty, mathematical elegance and real-world physics wrapped up in one image.

I was musing over the weekend on ways to automatically detect the vertex types, but without seeing Brian's image (some net-nanny seems to have auto-removed it before it got to our newsservers) I don't know what sort of quasicrystal he's dealing with. Something like a Penrose tiling, with only a pair of polygonal units, would be pretty simple, but more complex quasicrystals would make it a bit too involved, and it's easier to just point at the screen.

Of course, the hardcore quasicrystallographer will use MPFIT to find the higher-dimensional regular lattice of which the quasicrystal is the two-dimensional projection. I'll leave this as an exercise for the reader :-P.

Struan
