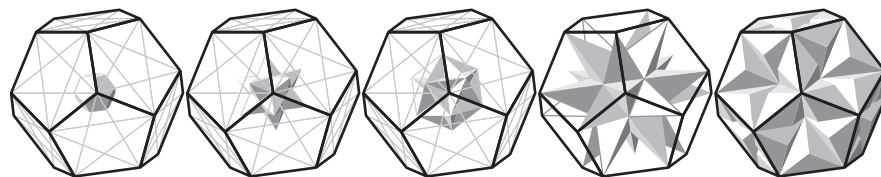


The three-dimensional structure of dodecafoam bears a passing resemblance to the conjectured internal structure of a new class of materials, "quasicrystals", first recognized in 1984. Such materials appear crystalline and show global order, but grow into forbidden symmetries, such as that of the regular dodecahedron.

Dodecafoam



To a large degree, the exact nature of such materials is not understood. Dodecafoam is related to one kind of model of possible structure; but it may be that actual quasicrystals have much more disorder at very small scales. We just don't know. Moreover, it is still not understood just how and why atoms fall into place in such structures.