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Letters

Edgy arguments

"Shadows and Symmetries" (SN: 12/21 & 28/91, p.408) gives only the slightest taste of fivefold symmetry. For instance, there is no mention of Leonardo Fibonacci's series with his breeding rabbits, which increase in the divine proportion each generation.

The cube with its three edge-zones suggests the standard grid. The question "Where are you?" has one three-word answer — the distance along each zone to reach the address.

The dodecahedron is not so economical, but it can be more fun. Its 30 edges point in 15 directions. "Where are you?" could be answered in 455 ways — except the dodecahedron's edges flatten into six families of five lines and 10 families of three lines. These deflate the addresses to leave 385.

While the cube suggests a block length with which to measure addresses, the six families of five dodecahedral edges caught flat in a plane argue endlessly over proper block length as

This Week

- 116 Adult Attitudes: Share and Share Alike
- 116 Making sense of the disorder inside viruses
- 117 Glasnost offers oil-and-gas dividend
- 117 Low-level radiation has delayed effects
- 118 Ulysses: A magnetic odyssey, by Jove
- 118 Babies adapt to low-fat mother's milk
- 119 Achieving control of chaotic laser output
- 119 In Antarctica, scientists go with the floe

Research Notes

- 123 Anthropology
- 123 Biomedicine
- 127 Chemistry

Articles

- 120 Chaos in the Clockwork
- 124 The Adjuvant Advantage

Cover: Bark from the rare Pacific yew tree, *Taxus brevifolia*, yields an experimental drug that may assist in the battle against breast cancer. (Photo: Michael D. Ellis)



Departments

- 114 Books
- 115 Letters

Science Service, a nonprofit corporation founded in 1921, gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of disadvantaged groups.

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they intersect each other not at endpoints or even midpoints, but where one length is in the divine proportion to the remainder. This quarrel among five lines over proper block length descends to smaller and smaller intervals like today's popular fractals. The fivefold symmetry enthusiast is bored by the convenient cube. He enjoys the patterns of arguing lines, finding that the intervals form Fibonacci series.

Might our study of fivefold symmetry reveal that matter is composed not of quarks and gluons, but finally of just very, very tiny Fibonacci rabbits?

Steve Baer
Albuquerque, N.M.

Blame the messenger?

"More evidence of a solar neutrino shortfall" (SN: 12/21 & 28/91, p.406) illustrates the remarkable tenacity with which scientists cling to popular theories.

The successful detection of neutrino bursts two years ago from a supernova thousands of light-years away would seem to affirm neu-

trino-detection capability. However, in rejecting the validity of their own solar neutrino counts, patiently collected over a span of decades from a source just a few minutes away, they blame the messenger for the nature of the message. Once again, we are left with the feeling that if the data do not support the current theory of solar energy, they really ought to.

Ralph Pacini
Grand Junction, Colo.

Aggression in Israel

I was taken aback to read that Carol Lauer's report on the aggression of Israeli children was researched at "an Israeli kibbutz" ("Females show strong capacity for aggression," SN: 11/30/91, p.359). Only 2 percent of Israel's residents live on a kibbutz of one sort or another, and individual kibbutzes differ so sharply in ideology, philosophy and practice that no one kibbutz should — or can — furnish

Letters continued on p.127

FEBRUARY 22, 1992

115