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Letters

No lack of lumps in primordial soup

I am amazed that men of science are puzzling over the riddle of how the universe we see can be lumpy if the universe began as a hot, uniform soup of radiation and particles ("Cosmological Controversy: Inflation, Texture, and Waves," SN: 5/22/93, p.328). As beautiful and elegant as nature may be, it has never produced anything remotely approaching perfection or symmetry. Even snowflakes and butterflies' wings are not truly symmetrical.

The answer to the riddle is that the primordial soup was never uniform. It came with lumps. That is Nature's way. The question I ask is not, Why did the universe become lumpy? but rather, Why would it have ever been smooth?

Nelson G. Thomas
Richland, Wash.

Biodegradable disinfectants

We share reader Clarence Peger's concern

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Cover: Two maps generated by the Magellan spacecraft compare Venus' gravity (top) with its surface features (bottom). The maps show the highlands of Atla Regio (left peaks in both images) and Beta Regio (right peaks); the near-perfect correlation suggests these regions maintain their shape by the constant upwelling of hot material from Venus' mantle. (Photo: NASA/Jet Propulsion Laboratory)

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Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It 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 underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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that the essential role of formulated cleaning products in controlling infectious diseases is too often overlooked in discussions about protecting the environment ("Biodegradable but not benign?" SN: 5/29/93, p.339). But we must emphasize that, contrary to the implications of Mr. Peger's letter, the presence of a disinfecting agent does not make a cleaning product nonbiodegradable. For example, sodium hypochlorite is a very effective disinfectant that degrades primarily into salt and water.

David J. Neun
Research Director
Soap and Detergent Association
New York, N.Y.

Herpesvirus-6 as AIDS cause?

The possible role of the ubiquitous herpesvirus-6 in heart disease and immune system dysfunction is interesting for several reasons ("Herpesvirus decimates immune-cell soldiers," SN: 4/3/93, p.215). As everyone knows by now, AIDS is an acquired syndrome. The new evidence raises the possibility that

herpesvirus-6 actually causes AIDS by activating a normally quiescent HIV infection.

Although HIV is universally accepted as the cause of AIDS, the evidence is still not all that compelling. In fact, HIV infection is not even required for a diagnosis of AIDS, according to the Centers for Disease Control and Prevention. The current definition of AIDS is any one of 27 different diseases accompanied by low numbers of CD4 cells in the immune system.

Thus the causal agent (HIV) of a disease (AIDS) is not required to cause the disease. Is this a bit of scientific legerdemain or what?

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