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the open exhaust as the temperature is dropping? Wouldn't an inverted outlet or some type of exhaust cap be appropriate?

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5/89

SCOTT CHAPIN (SHOWN ON THE APRIL 1989 COVER) REPLIES: Our main objective in designing radon mitigation systems is to reduce the risk to the occupants of any building of exposure to the effects of radon. Rain caps are installed for the deflection of rain, which may cause a problem in severe cold weather. However, these caps also serve to deflect the concentrated exhausting radon back onto the roof of the structure, to possibly reenter through ridge vents, open skylights or even bedroom windows. The real problem is not water entering from outside the system, but moisture from the ground traveling through these systems. When properly designed and calibrated, a radon exhaust will have enough air velocity to deflect most of the rain that would potentially enter a 2-, 3- or 4-inch pipe. Until someone designs a cap that will allow the radon to dissipate vertically above the house and at the same time deflect rainwater from entering, an uncapped system is the better choice.

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10/89

How 'Frustration' Set In

It was a challenge to survey the full story of spin glasses for PHYSICS TODAY, and one cannot but admire the visionary breadth of Philip W. Anderson's coverage.

Perhaps two small comments will be useful:

▷ A superficial reading of "Spin Glass V" (July, page 9) has led some people to believe in a rivalry between Phil and me about the paternity of the term "frustration." I am happy to report that there is not any dispute. Here is an extract from a text I wrote ten years ago¹: "One last anecdote: In the summer of 1976, I attended a lecture by P. W. Anderson on spin glasses in the patio of the Aspen Center of Physics; I was not actively working in this field, things appeared pretty esoteric to me, but one sentence which remained as graffiti in one corner of the blackboard struck my imagination: 'The name of the game is frustration.' When I looked

for a word which would evoke both the effect of contradiction and an analogy with percolation, it came back to my mind."

▷ In all fairness, the names of Jean Vannimenus and Marc Mézard should have also appeared in the list of the main Paris-Rome actors.

Reference

1. G. Toulouse, *Modern Trends in the Theory of Condensed Matter* (Springer Lecture Notes in Physics, vol. 115), Springer-Verlag, New York (1980).

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10/89

Prizes and Their Problems

You really must do something about this chap David Mermin. First he has the gall to write a column suggesting—on the basis of the spelling of "Lagrangian"—that no one reads the journals. And now in the January 1989 PHYSICS TODAY (page 9) he has the nerve to suggest that we should forgo the true purposes of existence (such as nominating people for prizes, writing letters supporting nominations and sitting on committees to review them) just to get back to doing physics.

The fact is that what Mermin, bless him, is doing with sarcasm and wit needs to be attended to with great seriousness and clear-headed analysis by the scientific community. Out of my own dark night of the soul of a science administrator I have studied and had my students in my science policy classes analyze similar problems. Here is my list of the most serious problems facing science (at least American science) that we brush under the rug. They all deal with work time.

▷ The "literature" has become meaningless as a usable resource. I remember Peter Debye saying at a conference on *Chemical Abstracts*, when asked what he does about the literature, "I just [pronounced *chust*] ignore it." He explained that he knew all the top labs and kept up with their work: To do a thorough literature job would take away from doing his own science. That was 20–25 years ago. Today I *feel* the same way—but I know better. New work is coming out all over the world, and the paper count is growing exponentially. I cannot read more than a tiny, tiny fraction of it. The citation business must become more and more meaningless because we cite a small circle of friends (and ourselves of course) and innocently (perhaps) ignore most foreign and all

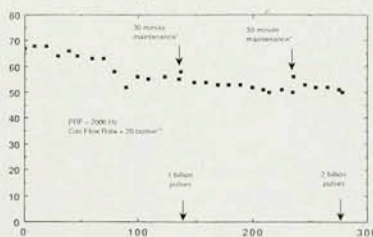
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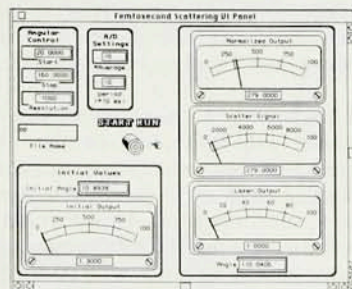
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