

preprint server and its freely available articles. A lack of fluency in the English language can also be an obstacle.

Consequently, the thirst for knowledge can be satisfied by your presentation and your patience in explaining your investigations and showing your methods. Graduate students in developing countries are often grateful for guidance and will work wholeheartedly on topics you suggest. Both you and the students will benefit from that symbiosis. They have problems to work on and a mentor for advice, and you have a broader audience and a larger collaborative team engaged in studying the topics that interest you.

In addition to the benefits of recruitment, collaboration, and dissemination of your research, you get to see the world in relative safety, in the hands of locals. My experience, without exception, has been that my hosts showed me great respect and took care of me far beyond my expectations. From the moment I arrived to the moment I departed, they made sure I was safe and well nourished and that I had a full experience of their coun-

try and culture. Because your local hosts profoundly understand the risks in their home countries and how to mitigate them, you can be sure that you're in good hands: They will not invite you if you will be in danger, and you will be told immediately if risk becomes a concern.

Our understanding of much of the developing world is caricatured by news stories and documentaries that emphasize sensationalism and neglect the cultural soul. The benefits to you of being there and seeing the countries and environments for yourself are enormous. So when that opportunity arises to visit a developing country, seize it. Say yes. Share your research interests and your passion for science with people who lack your resources and connections, and let them spoil you with a visit that you will always remember.

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comes crucial, and the partial analogy to the oil drops fails. In other words, the analogy does not extend to what most people consider the most interesting aspects of quantum mechanics.

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I was recently perusing my copy of the August 2015 issue of PHYSICS TODAY, looking in particular at the feature articles. To my surprise, I read the following as the opening of "The new wave of pilot-wave theory" by John Bush:

"If particle physics is the dazzling crown prince of science, fluid mechanics is the cantankerous queen mother: While her loyal subjects flatter her as being rich, mature, and insightful, many consider her to be démodé, uninteresting, and difficult. In her youth, she was more attractive."

I trust that Bush was intending to be charismatic and appeal to his male readers. However, I was disappointed that he did not think through the sexist stereotypes that this writing reinforces. Invoking a metaphor that casts women as the "cantankerous queens" of science does not help us to be treated with respect in the workplace.

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► **Bush replies:** I appreciate Jeffery Winkler's opinion, but it has yet to be proven that dynamic nonlocality of the form exhibited by the walking droplets cannot give rise to a feature analogous to quantum nonlocality, that memory cannot account for entanglement. A proof, rather than an assertion, on this matter would be most welcome.

I feel obliged to point out to Leslie Kerby that in my opening paragraph, I was appealing not to my male readership but rather to the careful reader. The cantankerous queen mother was a metaphor for the field of fluid mechanics, not women in science. She was, moreover, cast as the heroine.

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LETTERS

Walking droplets, pilot waves, and word choices

After reading John Bush's article "The new wave of pilot-wave theory" (PHYSICS TODAY, August 2015, page 47), I want to remind readers of the limitations of the analogy. The oil-drop experiments provide a tangible partial analogue of the pilot-wave picture, but one that is restricted to single-particle phenomena. Such experiments cannot reproduce the types of phenomena that depend on entanglement; only in the case of a single particle does the wavefunction have the same mathematical form—a scalar function over space—as the waves in the oil.

Once two particles are involved, the fact that the wavefunction is defined over the configuration space of the system rather than over physical space be-

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