

sphere will be deflected to the right—southward—by the same distance as its cousin fired northward is deflected eastward. (In the Southern Hemisphere, both will be deflected to the left.) Therefore, it would have been impossible for Riccioli and Grimaldi to determine whether Earth rotates by comparing the deflection of cannonballs fired in different directions.

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■ **The first two letters** in the August 2011 issue of PHYSICS TODAY (page 8), on Georges Lemaître's Hubble relationship and on the Coriolis effect, have more in common than being printed on the same page. Two scientists highlighted in the letters were Catholic priests. Lemaître was a Belgian priest and Giovanni Riccioli an Italian Jesuit.

The science described in the letters—the expansion and fate of the universe and Earth's motion—bears on matters important in the history of science and religion, so it seems worthwhile to point out the other vocation of the two men.

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Einstein, too, miscredited Hubble's "discovery"

The letter by Michael Way and Harry Nussbaumer (PHYSICS TODAY, August 2011, page 8) refers to Edwin Hubble's "discovery" of the expansion of the universe as one of the "falsehoods still being promoted today" by "prominent people writing in the popular press." I note that the same story was also promoted early on by Albert Einstein. I found the following in his *Relativity: The Special and the General Theory* (Random House, 1961), which I had just finished rereading when my issue of PHYSICS TODAY arrived. In appendix 4, apparently written sometime before June 1952, Einstein writes about the impact to his general theory of the discovery of the nonstatic nature of the universe. After a discussion about Alexander Friedmann but no mention of Georges Lemaître, Einstein says,

A few years later Hubble showed, by a special investigation of the extra-galactic nebulae ("milky

ways"), that the spectral lines emitted showed a red shift which increased regularly with the distance of the nebulae. This can be interpreted in regard to our present knowledge only in the sense of Doppler's principle, as an expansive motion of the system of stars in the large—as required, according to Friedman, by the field equations of gravitation. Hubble's discovery can, therefore, be considered to some extent as a confirmation of the theory.

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A resource for laboratory safety

Two letters regarding laboratory safety, especially in academic environments, have caught my eye (PHYSICS TODAY, August 2011, page 9; October 2011, page 11). When I was a postdoctoral researcher, I learned a great deal about safety and safety management in a laboratory environment at the Princeton Plasma Physics Laboratory. I find myself introducing ideas about safety management and referring to PPPL's safety manual frequently in my current university environment. The manual, online at http://www.pppl.gov/eshis/ESHD_MANUAL/sm.html, is a wonderful resource for those concerned about laboratory safety.

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Czech sculptor deserves credit

How about giving us the name of the contemporary sculptor who created the work on the cover of the September issue of PHYSICS TODAY? You credit the photographer; that is a good first step. Now go the rest of the way and honor the fine arts along with the sciences.

Mary Dryburgh

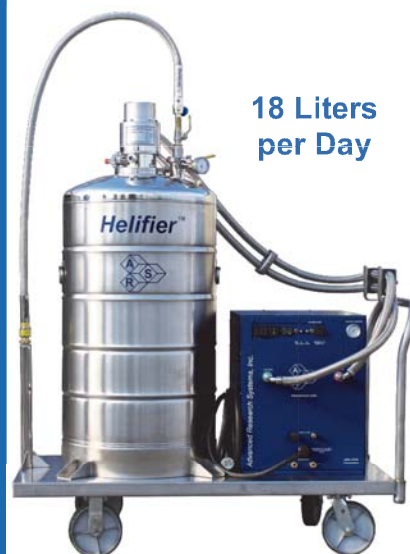
(mdryburgh@columbiabasin.edu)

Esvelt Gallery
Columbia Basin College
Pasco, Washington

[Editor's note: The statue of Tycho Brahe and Johannes Kepler, completed in 1983, is the work of Czech sculptor Josef Vajce. We thank Mary Dryburgh for her inquiry.] ■

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