

Respect for the 'human rights of nations'

It is commendable that during the 100th-anniversary celebration of Albert Einstein's miracle year, Turkey recognized the contribution of British physicist Henry Moseley (PHYSICS TODAY, November 2005, page 24).

Moseley's connection to Turkey is based solely on his death in Gallipoli in 1915. As astrophysicist Mehmet E. Özel is quoted, "Of course he is British, but he is lying in our land. We consider him part of our heritage."

In contrast to the above, an ancient church in the province of Diyarbakir was recently torn down and its stones used for the foundation of a mosque in its place. This is part of a continuing effort, begun in 1915, to destroy the cultural and religious heritage of the Armenian homeland of 4000 years.

Let us also remember and honor Einstein's concern and desire to "respect freedom and the human rights of nations."¹

Reference

1. A. Einstein, H. Mann, "Appeal to the International League of Human Rights," available at <http://www.hr/darko/ett/einste.html>.

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Wentzel's lesson in humility

The WKB approximation used in quantum mechanics doesn't often draw attention, but it appears in John Knox's letter (PHYSICS TODAY, September 2005, page 17). Knox properly identifies Gregor Wentzel as the "W" in that acronym, thereby bringing back memories of a period in 1948 when I took a quantum mechanics course taught by Wentzel at the University of Chicago. He was a great teacher who was known for his humility and self-effacement. I remember his first reference to WKB when he wrote on the blackboard, "BKW," clearly announced the names "Brillouin" and "Kramers," and almost as an aside, mumbled the "Wentzel."

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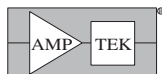
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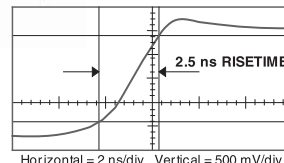
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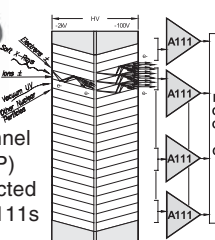
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A colorful relativity problem

The cover of the January 2005 issue of PHYSICS TODAY is supposed to depict what the market square at Tübingen would look like if you were approaching it at 90% the speed of light. Off-hand, I'm not sure this is what the square would look like at that speed, but I am sure the colors would be different. All wavelengths would be shorter by more than a factor of two. So, unless that little octagonal pond is actually red, you've got a problem with your relativity.

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Editor's note: We invited Marc Borchers, who supplied the cover image, to comment.

Borchers comments: The image on the PHYSICS TODAY cover depicts the geometric distortion only, so it is not

what one would actually see when falling at 90% the speed of light. In addition to the shift in colors due to the Doppler effect, the appearance would be dominated by the searchlight effect. When looking in the direction of motion at 90%, the wavelengths would be shorter by a factor of 4.35, while the intensity would increase by a factor of more than 1500 (Doppler factor to the fifth power); the exact value depends on the spectral distribution in the infrared. To accurately render the color distortion, we would need the spectral distribution of the scene in the infrared. Unfortunately, we don't know this distribution for the market square.

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Correction

April 2006, page 40—The total projected cost of NASA's *James Webb Space Telescope*, scheduled for launch in 2013, is \$4.5 billion. ■