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Letter to the Editors of Physics Today

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Disclaimer

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Two points in our recent article on Edward Teller's scientific life (Physics Today, August 2004, page 45) require correction.

In our description of Teller's students, we incorrectly stated that Arthur Kantrowitz's thesis was on the generation of hypersonic molecular beams. Actually, his thesis was on heat capacity lags in gas dynamics.[1] Kantrowitz's invention of high intensity sources for molecular beams came later in his career.[2]

Maurice Goldhaber has emphasized that the situation with respect to possible nuclear resonances in (γ,n) or (γ,fission) reactions was quite unclear at the time of George C. Baldwin and G. Stanley Klaiber's papers on these reactions.[3] This was because the rapid rise of their yield to a prominent peak with increasing energy, followed by a slower fall off was then thought to have been due to the competition between the rapidly rising density of nuclear states and the eventual domination of other reaction channels at higher energies. Goldhaber realized, however, that there could be an analogy between a possible collective nuclear resonance and the restrahl resonance (essentially the transverse optical phonon mode) in polar crystals. Goldhaber sought out Teller because of his paper with Russell Lyddane and Robert Sachs.[4] relating the restrahl frequency to the asymptotic behavior of the crystal's dielectric function. Goldhaber and Teller, in their paper together, went on to predict *universal*, giant photo-nuclear resonances.[5]

References

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2. A. Kantrowitz, J. Grey , *Rev. Sci. Instrum.* **22**, 5, 328 (1951).

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4. R. H. Lyddane, R. G. Sachs, E. Teller, *Phys. Rev.* **59**, 673 (1941).

5. M. Goldhaber, E. Teller, *Phys. Rev.* **74**, 1046 (1948).

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