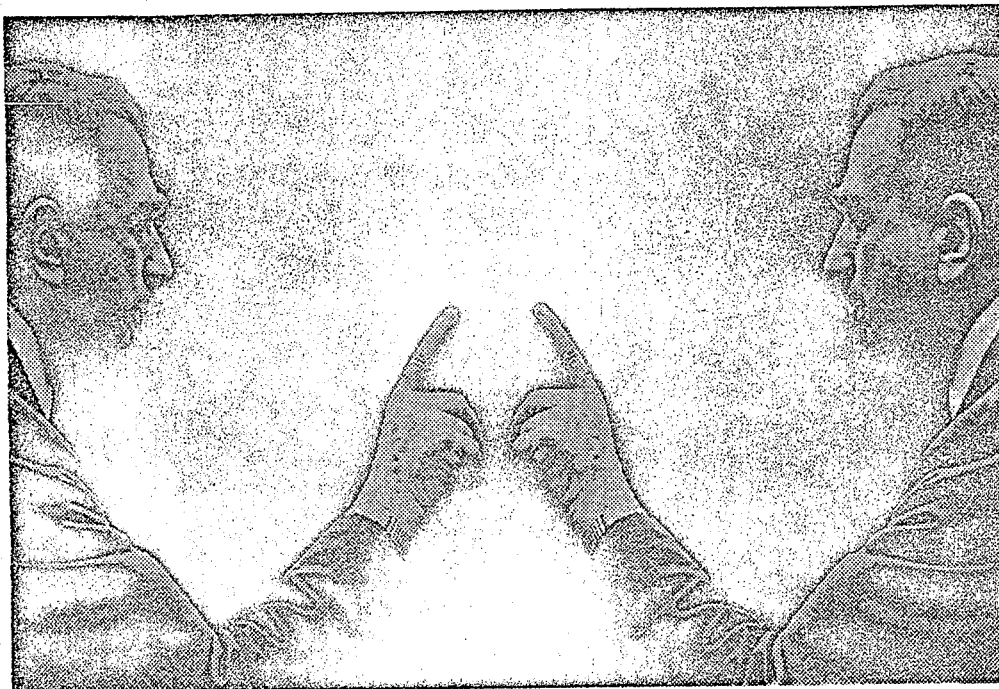


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**EYEBALL TO EYEBALL:** At right is Dr. Edward Teller, the famous nuclear scientist. Confronting him is "Dr. Anti-Teller," his anti-matter counterpart. This representation of their imaginary encounter was used by Dr. Val Fitch of Princeton last week to illustrate his lecture on current physics problems at the National Academy of Sciences.

### Dr. Teller and Dr. Anti-Teller

In 1956 a physicist now at Princeton, Dr. H. P. Furth, wrote in verse of the disaster that might occur if Dr. Edward Teller, the physicist, should meet his counterpart from a world composed of anti-matter. Research in physics had revealed the existence of mirror-image counterparts to all the particles composing matter on this planet. When such an anti-particle meets a normal particle they interact violently. Both may disappear completely, leaving only a burst of gamma rays.

Dr. Teller, however, had postulated that worlds may exist where anti-matter predominates. There any particle of what to us is ordinary matter would vanish in a flash. Last week, at the annual meeting of the National Academy of Sciences, Dr. Val L. Fitch, professor of physics at Princeton, pointed out that experiments in which he has played a leading role suggest a subtle lack of symmetry between the worlds of matter and anti-matter.

He cited the poem of Dr. Furth, published in a 1956 issue of *The New Yorker*, and displayed a photograph, shown above, of the hypothetical encounter, noting that Dr. Anti-

Teller parted his hair on the right, in proper mirror image of his earthly counterpart. The poem, called *Peril of Modern Living*, read:

*Well up beyond the tropostrata  
There is a region stark and stellar  
Where, on a streak of anti-matter  
Lived Dr. Edward Anti-Teller.*

*Remote from Fusion's origin  
He lived unguessed and unawares  
With all his antikith and kin,  
And kept macassars on his chairs.*

*One morning, idling by the sea,  
He spied a tin of monstrous girth  
That bore the letters: A.E.C.  
Out stepped a visitor from Earth.*

*Then, shouting gladly o'er the sands,  
Met two who in their alien ways  
Were like as lentils. Their right hands  
Clasped, and the rest was gamma rays.*

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From what has now been learned about the deviations from perfect symmetry, in the behavior of matter and anti-matter, Dr. Fitch said, it appears that Dr. Teller "could suggest a few experiments before shaking hands."