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## Millikan award for 1981

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# Millikan award for 1981

Robert G. Fuller

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When he was born in Shanghai, China, Albert Allen Bartlett looked out from his baby crib and asked his parents if they had noticed the regular patterns in the shadows cast by the Great Wall. When they looked puzzled he explained to them the formation of images by shadows as well as by lenses and mirrors. So early in his life Al began finding everyday examples of physics and explaining them to others.

It was during his teen years, when he suddenly sprouted up from a normal size to his present extraordinary height, that Al first became interested in growth. He noticed that his trouser length was doubling every year. He immediately worked out a prediction of his adult height. Wow! Fortunately, for all of us, the genetic code took over and his growth stopped. Albert A. Bartlett never forgot this lesson, and he later published nine articles on exponential growth in *The Physics Teacher*.

As a young man, Albert Bartlett turned his attention to the formal study of physics at Colgate University. It was in his steam-heated dormitory room there that he first noticed unusual patterns of melted snow on the window ledge near the radiator. During his time at Colgate he did considerable research in this area of snow-pattern physics and graduated with a BA in physics in 1944.

Shortly thereafter he pursued both graduate work in physics at Harvard University and Eleanor Roberts. He was successful in both pursuits. He was married to Eleanor in 1946, received an MA degree in physics from Harvard in 1948 and a Ph D. in physics in 1951. He joined the faculty of the University of Colorado in 1950 and has remained a faculty member there, except for short periods of leave.

Albert has been an outstanding physics teacher on his own campus. He has made important contributions to the design of demonstration lecture auditoria. He offered a superb demonstration lecture for AAPT members at the summer meeting in Boulder in 1975.

Albert has been persistent in his writings about issues related to physics teaching. He has published 17 papers and nearly 100 notes and letters. It is for his untiring efforts to educate the public to the consequences of exponential growth that he is best known. His "Forgotten Fundamentals of the Energy Crisis" presentation has been widely copied by others. In addition, Al has traveled all over and given his own presentation nearly 1000 times!



**ALBERT ALLEN BARTLETT**

Professor Bartlett has made extraordinary contributions to public life outside of physics teaching. He is an effective leader in faculty governance both within the physics department and in the University of Colorado as a whole; he is a vocal and articulate advocate of constructive concern for perceptive planning in the city of Boulder; and yet more broadly throughout his career he has devoted untiring efforts to raise the consciousness of the public not only to the beauty of physics but to the value of our history, to the richness of our heritage, and to opportunities to assure a good life for the future.

In conclusion, for his notable and creative contributions to physics teaching, in particular how he has alerted us to the implications of our cultural assumptions, how he has found interesting physics everywhere, and how he has valued the humanity of physics, the American Association of Physics Teachers presents to Albert A. Bartlett the 1981 Robert A. Millikan Award.