

Professor Tor Bergeron, 70 years on August 15, 1961.



It is very difficult indeed to realize that Tor Bergeron has now reached the venerable age of 70. I have always been accustomed to treating Tor as a younger colleague, feeling towards him that benevolent sympathy and understanding which one generally reserves for the eager young enthusiasts. According to Fridthjof Nansen the "spirit of adventure"

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is the privilege of youth. Tor Bergeron has been an adventurer, his field has not been the unknown arctic regions, but the unknown regions of the atmosphere. His "how" and "why" has been reserved for the problem of the weather.

Tor Bergeron is a born meteorologist. His sense of nature's beauty, his keen observation

of her bad and good humour (a not too scientific definition of the weather) was characteristic of the young man who in 1918 in Lapland made detailed studies of visibility conditions in the atmosphere, and thus approached the problem of "air masses" in a new, original way. Soon afterwards he came to Bergen and could tackle the air mass problems by using the dense Norwegian network of stations introduced by Vilhelm Bjerknes. J. Bjerknes and H. Solberg had already started that work, and discovered the wave model of cyclones. T. Bergeron found the occlusion, and with his discovery of frontogenesis and air masses, gave us a picture of a succession of models: quasi-stationary front, wave, wave cyclone, occluded cyclone which might develop into a large scale depression, making possible a hyperbolic point, leading to a new quasi-stationary front, and so on. *Evolution* is characteristic of Tor Bergeron's models—also in cloud physics. His cloud types are not fixed, geometrical ones, but show a development from pure water clouds and ice clouds to the mixed, precipitating clouds. Some of these belong to the stable warm air masses, others to the unstable cold air masses.

Tor Bergeron is the philosopher of the Bergen school, equally interested in general principles and in problems of detailed analysis. His "Dreidimensional verknüpfende Wetteranalyse" is no easy reading, but try it, it's the Old Testament of modern meteorology! His later works, on cloud physics and on orographic effects in the distribution of precipitation are equally stimulating.

One of the most famous pictures in the world is Raffael's "School of Athens". Surrounded by noble architecture of magnificent pillars and arches, stand two figures forming the natural centre. One of them, Plato, points upwards to the world of ideas, the other, Aristoteles, turns our attention to the earth and all its problems. In times like ours, when more and more of the young meteorologists, like Plato, point towards the world of ideas, of the mathematical models of the high atmosphere and move up to the 500 mb surface (and stay there), we need our Aristoteles who—like Nietzsche—implores us to be "true to the Earth", where aeroplanes land and take off, ships navigate, fishermen toil under troubled weather conditions, farms fear the rain and the drought, and all ask—what's tomorrow's weather?

Tor Bergeron has friends all over the world. His interesting lectures, his inspiring talks (often mixed up with linguistics, cultural problems and, last but not least, Bach's music) have given pushes and impulses to many of his young colleagues.

Today they want to pay their homage to the "grand old man", the venerable septuagenarian; but solemn words like "venerable" and "septuagenarian" are not the right words for us who know him, who wish him good luck for his interesting future research and look forward to new stimulating lectures and inspiring talks.

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### Erratum

In Volume 13, Number 1, in the article »Harmonic analysis on cosmic ray data» by E. DYRING and B. ROSÉN, on page 115, column 1 eq. (9).

$$\sigma_s^2 = \frac{1}{n-5} \left\{ \sum_{k=0}^{n-1} (X_k - \hat{u}_d)^2 - \frac{n}{2} \hat{R}_2^2 \right\}$$

should be read

$$\hat{\sigma}_s^2 = \frac{1}{n-5} \left\{ \sum_{k=0}^{n-1} (X_k - \hat{u}_d)^2 - \frac{n}{2} \hat{R}_1^2 - \frac{n}{2} \hat{R}_2^2 \right\}$$