

27th European Cosmic Ray Symposium
Nijmegen, 25 – 29 July 2022

**Memories of the First European Cosmic
Ray Symposium**
Łódź, April 1968

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Why Poland? First ICRC in Krakow in 1947

Union Internationale de Physique Pure et Appliquée.	International Union of Pure and Applied Physics.
COLLOQUE SUR LES RAYONS COSMIQUES Craquevie - Octobre 1947.	SYMPOSIUM ON COSMIC-RAYS Krakow - October 1947.
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Document
R.C. 46-1.

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Prof. J. BARSCHEY-	Institute for Experimental Physics, Budapest, Hungary.
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...	
- 3 -	
Prof. J. A. WICKLER-	Palmer Physical Laboratory, Princeton Universi- ty, Princeton, New Jersey. U.S.A.
Prof. B. ZACER-	U. Karlova 5, Praha II.

Long history of research in Cosmic Rays: Maze
had worked in Wieliczka Salt Mine before WWII

Thanks to Henryk Wilczyński for the following information:

- Studies of cosmic rays, initiated by **Stanislaw Ziemecki**, were pursued in Poland before World War II
- The dependence of cosmic ray intensity on geographic latitude was studied in a sea-voyage between London and Buenos Aires and back, using an apparatus built in Warsaw
- Cosmic rays were studied in a series of high-altitude balloon flights. In addition, underground studies in salt mines were done both in Warsaw and Krakow (one of the mines used was that in Wieliczka near Krakow)
- An important figure was **Czesaw Bialobrzski** who had studied, with Ziemecki, the changes in conductivity of dielectrics due to cosmic ray bursts. He was very familiar with the cosmic ray scene. He nominated **Skobeltzyn, Blackett, Auger and Rossi** for the Nobel Prize in 1947.

Arnold Wolfendale and Włodzimierz (Alexander) Zawadski (Head of CR Group in Łódź) met at ICRC 1963 in Jaipur

Two biennial meetings for several years, more or less in parallel,

- High Energy Interactions and Extensive Air Showers (Wolfendale and Zawadski)

1968 Lodz

1970 Leeds

1972 Paris

.....

“As much information about high-energy interactions by studying EAS as you would about the workings of British Cabinet by reading the Sun newspaper”. J G Wilson

- Time Variations (including neutron monitors)

1968 Budapest

1970 Amsterdam

.....

Merger in 1976 to mark retirement of J G Wilson (Leeds)

The concept of what has become the ECRS was the idea of Arnold Wolfendale (Durham) and Wlodzimierz (Alexander) Zawadski (Łódź)

An attempt to enable discussions between cosmic rays physicists from Eastern and Western Europe at height of cold war

Experience at ICRC1965 (London):

A significant number of Russians there – with ‘minders’ – but very few spoke much English

Zatsepin gave many talks

Enthusiasm amongst my Leeds colleagues for visiting Eastern Europe was not high!



Getting visa

Getting flights to Warsaw

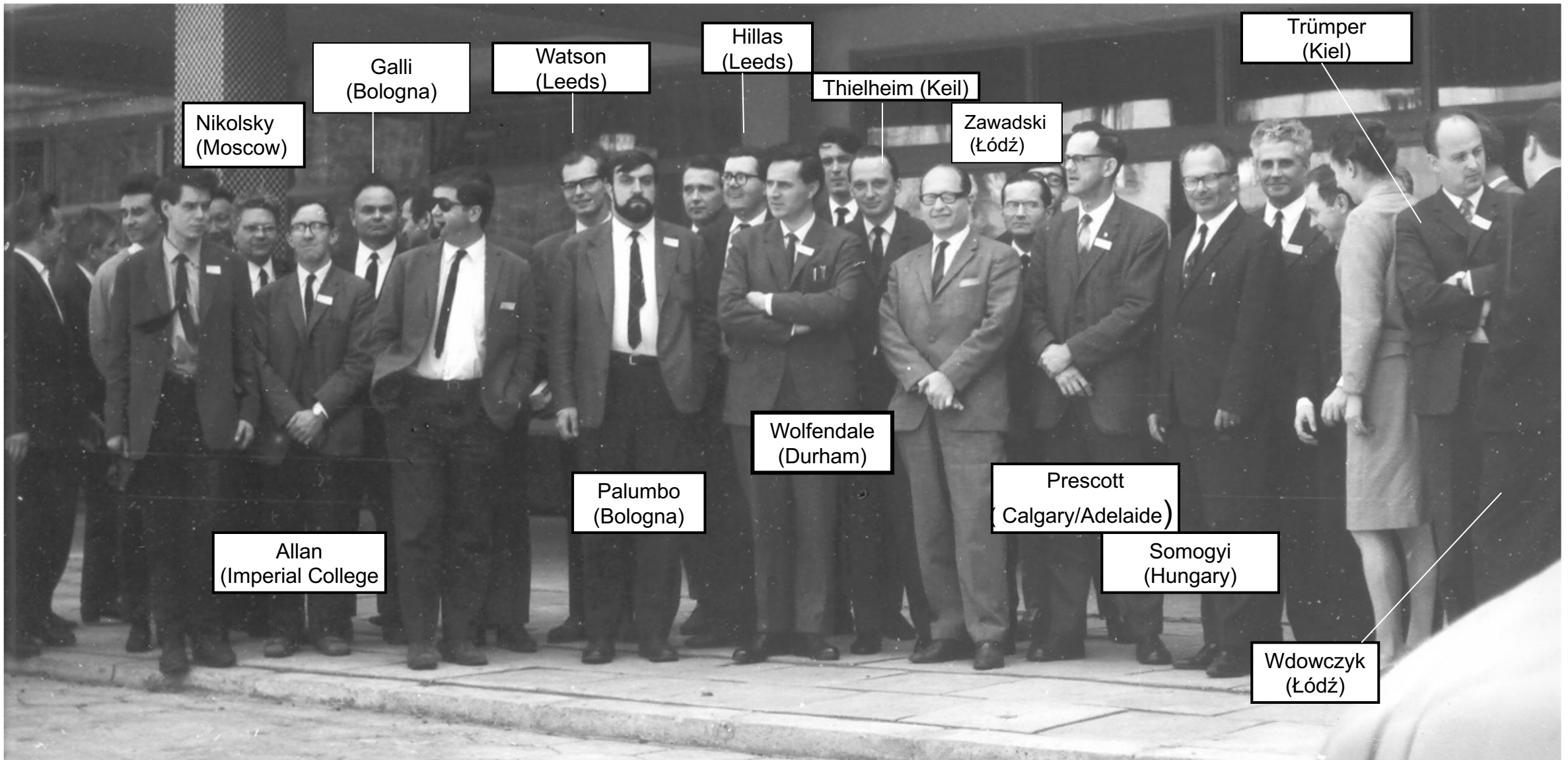
Daily Worker

East Berlin Airport

Walter Ulbricht
Chairman of the State Council of GDR



First European Symposium on High Energy Interactions and Extensive Air Shower: Łódź, Poland April 1968



First European Symposium on High Energy Interactions and Extensive Air Shower: Łódź, Poland April 1968

In the photograph there are 23 people

Australia/Canada: 1

Bulgaria: 1

**France 2: (Maze not in photograph: he had worked with Auger,
and in Poland before WWII, and later had a long
collaboration with the Łódź group)**

Germany: 3

Hungary: 2

Italy: 2

Poland: 5

UK: 6

USSR: 2 (but at least 5 were present)

Absent from photograph:

Young people like Maria Giler (later Giller)

Around 30 – 35 attended the sessions



Roland Maze and Joachim Trümper at source of Haverah Park water: during next Symposium Leeds meeting in 1970

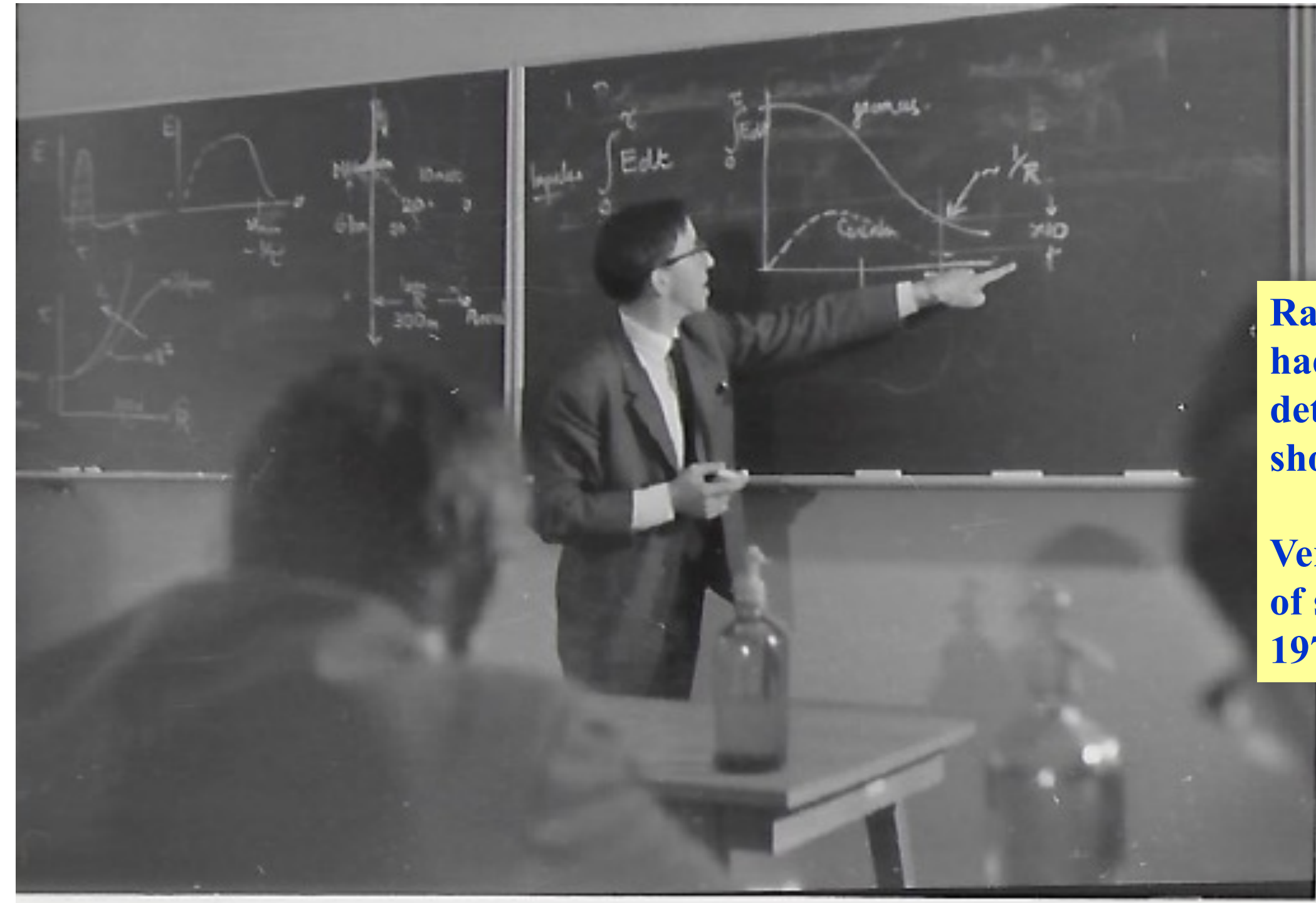


Arnold Wolfendale with George Wdowczyk during Łódź meeting: very long and productive collaboration

- **Talks were translated from Russian to English and vice versa**
- **Great contrast to ICRC1965 in London**
 - **Increases time to think**
 - Improves discussions**
 - Less aggressive arguments**

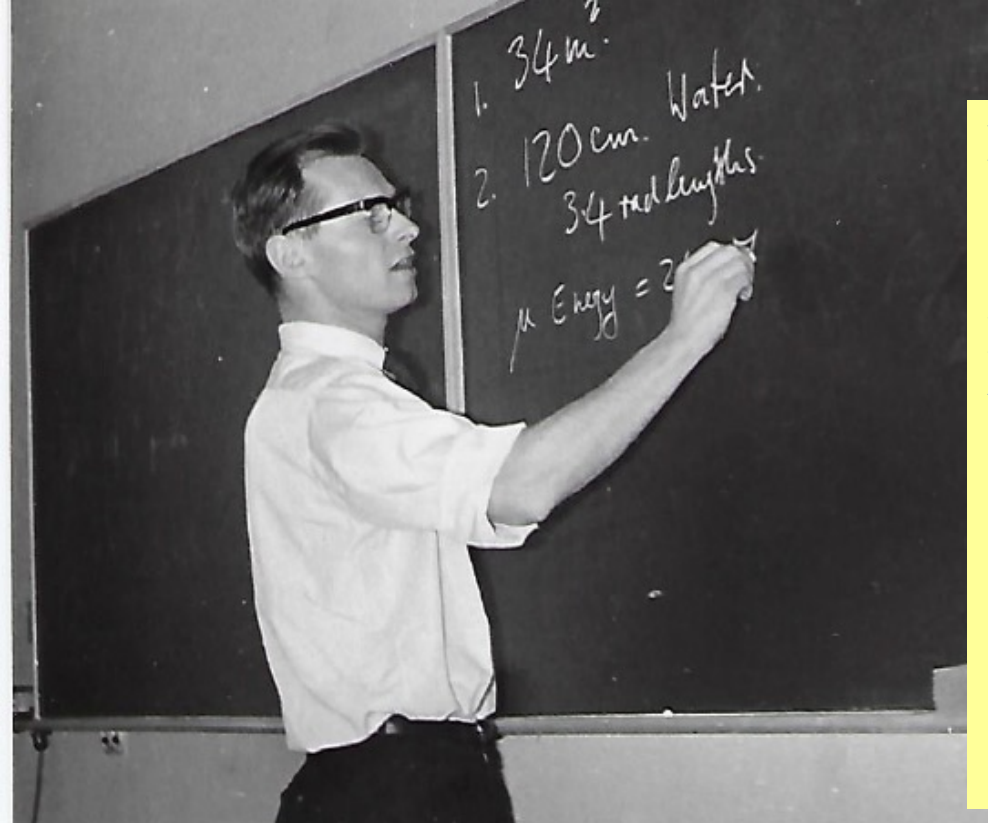
No evidence of any communist watchers





**Radio emission
had been
detected from
showers in 1965**

**Very lively field
of study until
1975**

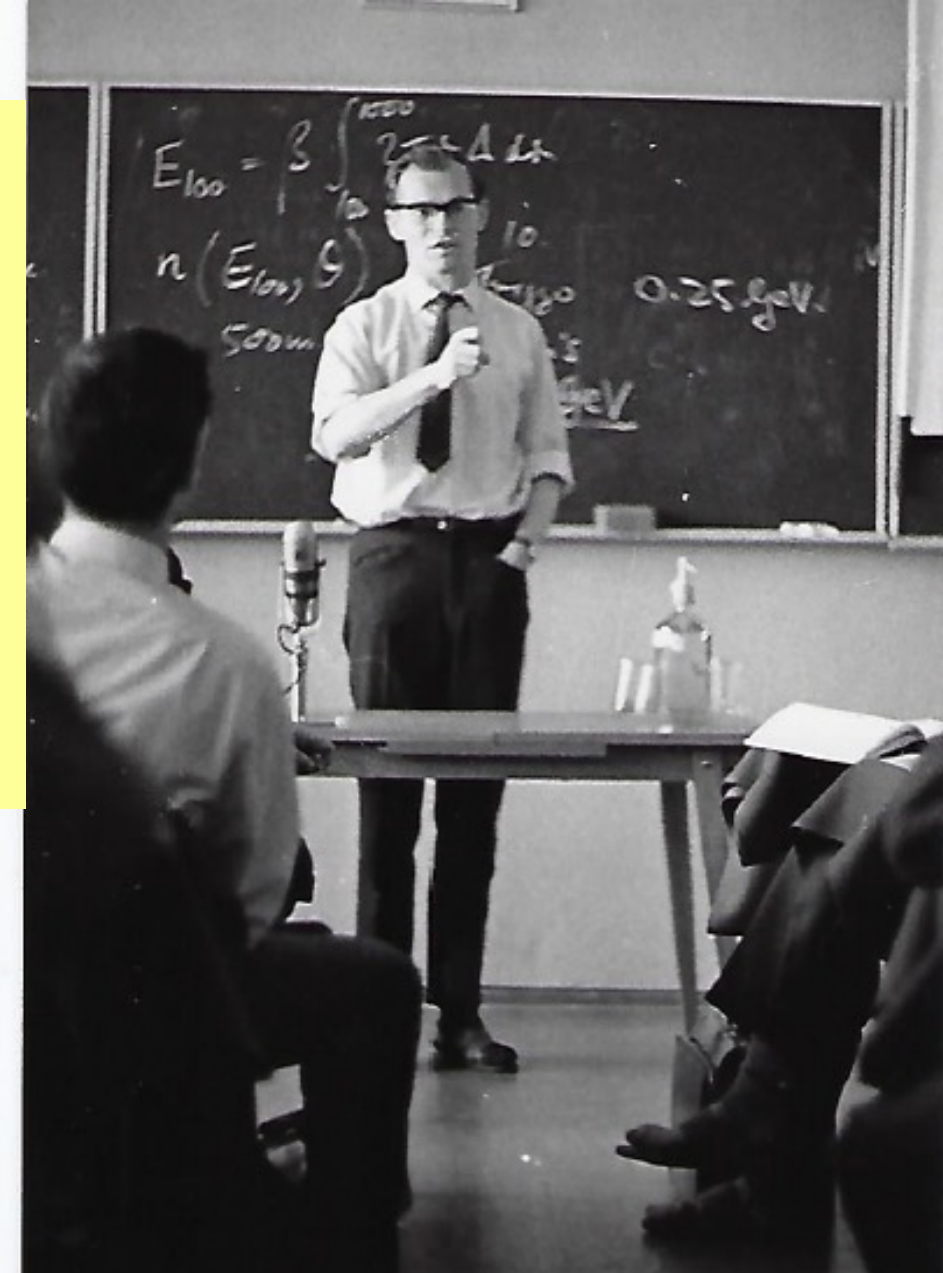


**Impossible to measure N_e
at Haverah Park**

**First attempt to break from
this**

$$E_{100} = K \int_{100}^{1000} r^{-n} dr$$

$$E_{\text{primary}} \sim 150 \times E_{100}$$



Very little belief, or understanding of water-Cherenkov detectors.

Russians still using GM-tubes, almost entirely, at MSU and Tien Shan

People measured shower size, N_e

**Few groups who did use scintillators put a lot of effort into trying to
convert scintillator signals into number of electrons**



With Nick Efimov

Yakutsk just being discussed



S I Nikolsky, A D Erlykin, Harold Allan, N N Efimov, G B Khristiansen

- Harold Allan formed productive collaboration on radio with Khristiansen
- Wolfendale with Erlykin
- Khristiansen became a personal friend



Festival of the Working People



Very generous hospitality:

Eagerness to display Polish culture

Chopin piano recital in a church

Performance of Prince Igor

At Vilanova Castle, Warsaw

Taken to visit rebuilt Old Town in Warsaw

Three groups:

Russians + other Eastern Europeans

Germans

Others

Other Random Memories:

- **In hotel: calls in the night**
- **Offers to exchange money – though only when I was with Giorgio Palumbo!**
- **Visit to home of Polish friends in Leeds to deliver some gifts**
- **Very successful meeting, certainly for me personally – Contacts!**
- **Meeting in Lebedev Institute a few months later**
- **Developed strong links with Russians at MSU, Lebedev Institute and Yakutsk**
- **Visited USSR about 5 times, and then twice more in post-Glasnost times**
- **Two-week visit to Yakutsk in 1984**