



NATO

ADVANCED STUDY INSTITUTE AT

CORFU

A commentary by A. Paskin

HAVING been a lecturer last summer at the NATO Advanced Study Institute at Corfu, I thought that my impressions of the meeting might be of interest to those who might not have heard either of the NATO Advanced Study Institute Program or of Corfu.

In 1959, the Science Committee of NATO inaugurated a program to subsidize scientific meetings of two weeks or longer, which involve highly advanced specialists in selected subjects. The first five such institutes were in Les Houches (France), Varenna and Naples (Italy), Corfu (Greece), and Kjeller (Norway). By some strange coincidence, the main topics of these first institutes were all in the field of theoretical physics. However, this year a wider range of subjects was covered by the institutes (now grown to fifteen). To get an idea of the scope of the program both scientifically and geographically, this year's institutes were as follows:

Biochemistry (Montreal, Canada); Plasma Physics (Ris, Denmark); Physics (Les Houches in France, Varenna, Naples, and Ispra in Italy, and Edinburgh in

the United Kingdom); Protein Analysis (Göttingen, Germany); Animal Productivity (Mariensee, Germany); Galactic Astronomy (Breukelen, Netherlands); Reactor Technology (Kjeller, Norway); Food Science (Glasgow, UK); Crystallography (Manchester, UK); Ionospheric Transitions and Solid-State Physics (Corfu, Greece).

If the Solid-State Physics Institute at Corfu is representative of the past five and the current fifteen institutes, I shouldn't be surprised to find the number will arithmetically progress to twenty-five in 1961. [Applications or requests for information should be sent to Prof. William A. Nierenberg, Science Adviser to the Secretary General of NATO, Place de Dauphine, Paris 16, France.]

To begin with, one of the reasons for the success of the institute at Corfu is certainly the Island of Corfu itself. The weather was so uniformly superb, that we visitors quickly got in the habit of taking sunlight and the same daily temperature range for granted. Lectures could and were always held outdoors which was pleasant, cheerful, and so bright that we couldn't use slides (in my opinion an asset). The informality in clothing, again a consequence of the climate of Corfu, set the

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Launay busily fills the board during an intermission. The informality of the meeting and the beauty of the room are in evidence.

tone for an equal informality in the sessions. Lectures were held in a small amphitheater shaded by big trees. The sessions started at eight in the morning and lasted until eleven (all these times being in Greek Standard Time which usually implies an allowance of plus a half-hour). After the morning session there was time out for swimming at the nearby beach, lunch, and the Greek equivalent of a siesta from about two to four-thirty in the afternoon. Although during the first week the visiting lecturers seemed to use the rest hours for preparing lectures, no one lecturer spoke throughout the whole meeting, and I assume everyone eventually learned to siesta as successfully as I did before the meeting ended.

In the late afternoon, from five to six, we held another session and we were then free of formal lectures for the day. The hours from six to ten in the evening were the most difficult for the North European and American visitors. Although we did get used to the afternoon nap, most of us could not get used to dinner at about ten at night, the usual Greek dinner hour. However, the view from the terrace of the Hotel Castello Mimbelli (a renovated Venetian castle or mansion) of the Ionian Sea and the mountains on the other side on the mainland, *almost* made up for the inconvenient dinner hour.

The scientific aspect of the institute was covered by Professor K. Alexopoulos in his informal opening of the sessions. The institute was to consist in part of a series of survey talks, each lasting about a week, and also shorter, more specialized talks lasting about three hours.

The thirteen foreign lecturers were then introduced to the rest of the participants (about thirty in number) and the institute was then in session.

I think that the best way I could summarize the technical part of the institute is to give a list of the speakers and the titles of their talks. These were as follows:

- D. G. Bordoni, "Linear Theory of Sound in Elastic and Inelastic Solids".
- F. Bruin, "Electron Resonance in Solids Due to X- or γ -Ray Irradiation".
- J. de Launay, "Crystal Elasticity and Harmonic Lattice Vibration".
- G. Leibfried, "Anharmonic Effects".
- H. J. Lipkin, "Mössbauer Effect".
- W. Ludwig, "Theory of Anharmonic Effects in Crystals".
- M. Nuovo, "Experiments on Inelastic Solids".
- A. Paskin, "Temperature Diffuse Scattering in Powders".
- M. Schön, "Vibration in Anisotropic Solids".
- J. Schrieffer, "Phonon-Electron Interactions in Solids".
- F. Stöckmann, "Semiconductors and Semiconducting Devices".
- G. de Vries, "Diffusion of Atoms in Metals".
- C. B. Walker, "X-Ray Studies of Lattice Vibrations in Single Crystals".
- K. Alexopoulos, "Comparisons of Characteristic Temperatures".



K. Alexopoulos opened the Solid-State Physics Institute at Corfu by introducing the speakers.



One of the more formal moments of the meeting. The author is at blackboard.

All in all, I feel the meeting was successful from both a scientific as well as a social point of view. It was informal and relaxed and there was always enough spare time for the many technical discussions among the participants, which to me is the most important aspect of such a meeting.

By way of conclusion (and in answer to the many questions I've been asked about the meeting and the amount of Greek culture I acquired) I would like to paraphrase an old Corinthian saying,

"Ου παντος πλειν εις Κερκυραν,"

which roughly translates into:

"Not everyone can sail to Corfu
... but it is worth the effort."