News and views

A Report from Les Houches

3rd Theoretical Physics Summer Session

For the past summer, I have had the pleasure and privilege of being on the staff of the "Ecole d'Eté de Physique Théorique" at Les Houches, France. This school (see *Physics Today*, December 1951, p. 22) was founded two years ago as an Institute of the University of Grenoble. It is almost entirely supported by the French "Direction Générale de l'Enseignement Supérieur", although various countries help to some extent in its financing through contributions or scholarships. It seems to me that some people may be interested in the progress of this unique experiment.

As in the previous year, strong emphasis was placed on modern physics. The principal courses were on statistical mechanics (L. Rosenfeld, Manchester), theoretical nuclear physics (M. Verde, Turin), and quantum mechanics (J. M. Luttinger). There is no doubt at all that the Summer School is taking a long step in bringing the teaching of theoretical physics to modern and high standards. It is hoped that the school will be an incentive to foster university centers which can operate the whole academic year around as, of course, *no* summer school could take the place of intimate daily contact with research over a period of years.

In addition to the main courses there were several excellent shorter ones (lasting a week or two) on special subjects. Invariance properties in nuclear collisions (Wolfenstein) and superconductivity (Schafroth), for example, aimed at giving the students a brief introduction into fields where considerable research is currently being done.

Finally there were an unusual number of fine seminars by visitors. The charm of the location plus the energy and enthusiasm of the entire Direction and staff draws to the Summer School practically every eminent physicist who passes anywhere nearby, in line of duty or pleasure. Particularly outstanding were the seminars of Pauli, Heitler, M. Deutsch, Koefed-Hansen, Gell-Mann, Wightman, and Villars. In spite of this already heavily loaded schedule, study groups were organized by students according to their interests.

There is no doubt whatsoever that the Summer School is filling a very widely felt need. The number of applications continues to exceed by far the capacity of the school. The excellence of the seminars, the possibility of contacts with physicists, the extremely pleasant and peaceful atmosphere of the school draw many people who are beyond the classroom stage. In my opinion, the school has struck an extremely happy medium in choosing its students. Although the level is very heterogeneous, the contact of the less advanced with the more is one of the most stimulating aspects of the school. It seems to me that there is nothing so fruitful for a talented but isolated student's development as being put with other students who have had more experience, or the advantages of better training: the ego then does more than any instructor can do. Also very valuable for the future is the international character of the school; about fifty percent of the students come from countries other than France. So much of theoretical physics at the present time depends on personal contact between physicists that those who wait for the *Physical Review* in order to get the news are usually consigned to the "also ran" column.

The Ecole d'Eté seems, in fact, to be so successful in these latter aspects that I think it could be emulated with great profit in the United States. Though there are many centers where modern theoretical physics is well taught, we lack almost entirely a place where our young physicists can freely meet and get to know all their colleagues.

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A Letter to the Editor

High-Altitude Research Facilities

A number of new facilities and improvements in the high-altitude laboratories in Europe have been instituted recently, the most significant of which we shall recapitulate, since they may be of interest to colleagues from other countries desirous of making use of them.

An Italian cosmic-ray laboratory now exists at Marmolada. This station is located at an altitude of 2006 meters, in the Italian Dolomites. The nearest large town, Cortina d'Ampezzo, is about two hours away from the laboratory by automobile. The last portion of the road is private, about 17 km from Caprile, and was built by an Italian electric power company, the S.A.D.E., in connection with work on a large water power development. The latter part of the surface is rather rough. The laboratory building consists of a single room roughly 15 x 25 feet. It is chiefly of importance because there is ample running water. A supply of some 30 kw of electric power is also available, and a large magnet developing some 7 kilogauss over a 25^2 x 6 cm cloud chamber is presently in operation. Ample housing is provided at a refuge nearby operated by the Italian Alpine Club and capable of accommodating several dozen people. An aerial tramway or cablecar (teleferique) runs up to around 2650 meters, at which altitude a shelter also exists and electric power is to be had; however, the magnet was not located there because of insufficient water. According to present plans, when the hydroelectric power station is completed it will be necessary to move the laboratory, and several sites in the vicinity are under study. A teleferique from Cortina to Faloria and Tondi, the latter at 2340 meters, is presently operative, and electric power is now avail-