

SEMINARS SEMINAIRES

WEDNESDAY 15 APRIL

THEORETICAL SEMINAR

at 14.00 hrs - Theory Conference Room

"Ising Models on Finite Group Lattices"

by T. Regge / Univ. di Torino

Abstract : The possibility of calculating the partition function for Ising models on certain finite groups through group representation theory and the Dimer method is discussed.

DD SEMINAR

at 16.00 hrs - DD Auditorium
(Building 31 - third floor)

"STELLA - Progress and Future Plans"

by M. Hine and B. Segal / CERN-DD

Abstract : STELLA links are now operational between CERN, Rutherford and Pisa, and are beginning to be used by physicists as part of their physics data processing. Stations at DESY, Frascati, Dublin and Graz will become operational in the coming months. A second phase of STELLA is now planned, in which the links will be used to connect with small stubs of CERNET in Rutherford and Pisa, so that physicists there can communicate with their computers at CERN just as if they were using another machine connected to CERNET here. The talk will also cover future PTT plans for European high speed data services.

THURSDAY 23 APRIL

CERN COLLOQUIUM

at 16.30 hrs - Auditorium

"What is the von Klitzing effect ?"

by T. Kinoshita / Cornell Univ. and CERN

Abstract : Last summer von Klitzing, Dorda and Pepper published a very intriguing paper claiming that the value of e^2/h (and hence α) can be determined very accurately using the quantum Hall effect of two-dimensional free electron gas which is experimentally realized in a semiconductor device called silicon MOSFET. Their initial measurement of α agrees with one determined by the ac Josephson effect to within ~ 5 ppm. More recent values agree to ~ 1 ppm, and further improvement is expected. Thus there seems to be little doubt that the effect is real. The problem is with the poor state of theoretical understanding of this remarkable result. As an interested but non-expert observer of this development, I will summarize what has been learned thus far both experimentally and theoretically.

BULLETIN CERN

16-17/81 - 13.4.81 and 20.4.81

TRAINING AND EDUCATION ENSEIGNEMENT

APRIL 27, 28, 29, 30

ACADEMIC TRAINING

(Tel. 2844)

at 11.00 hrs - Auditorium

"Macroscopic theory of superconductivity - Applications"

by E. Baynham / Rutherford Lab.,
Lectures 1 and 2, on 27 and 28 April

by C. Walters / Rutherford Lab.,
Lectures 3 and 4, on 29 and 30 April

Abstract : Practical applications of superconductors together with their problems will be outlined by way of introduction. The following topics will then be treated individually :

1. Stability - including the phenomena of degradation and training together with causes and solutions.

2. Flux Jumping - outlining the critical state model and adiabatic and dynamic prevention of flux jumping.

3. Cryogenic Stability - the parameters effective in the balance of heat generation and cooling will be analysed.

4. AC Losses - the reason for loss and how it occurs in various ways in composite conductors.

5. Magnet Quenching and Protection - outlining the precautions required to prevent burnout or breakdown in a quenching magnet.

6. Measurement Techniques - measurement of current and magnetization.

INFORMATIONS

GENERALES

GENERAL INFORMATION

PUBLICATION DU BULLETIN HEBDOMADAIRE PENDANT
LA PÉRIODE DE PÂQUES - RAPPEL

Cette édition du Bulletin hebdomadaire couvre la période de Pâques allant du lundi 13 au vendredi 24 avril.

Il n'y aura pas de Bulletin distribué la semaine du Vendredi Saint.

La prochaine édition (No. 18/81) paraîtra le vendredi 24 avril. Il est souhaitable que les annonces de ce prochain Bulletin nous parviennent dès que possible, et en tous cas pas plus tard que les délais normaux (mardi midi, 21 avril).

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