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Enseignement / Training and Education

ENSEIGNEMENT GENERAL ET TECHNIQUE

Connaissance du CERN

mercredi 22 mars

17.15

Grand Amphithéâtre

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En raison des vacances de Pâques, les cours sont interrompus jusqu'à la semaine du 3 avril.

ENSEIGNEMENT ACADEMIQUE

Le cours de programmation en Fortran-CERN pour physiciens et ingénieurs serait donné une nouvelle fois en avril, à raison d'une leçon par jour pendant trois semaines, s'il devait trouver une audience assez large (une vingtaine d'auditeurs). Les personnes intéressées voudront bien se faire connaître au Secrétariat de la Section de l'Enseignement (tél. 2844).

TRAINING AND EDUCATION SECTION - P I O

FILMS POUR LE CERN

Mardi/Tuesday, 21 mars/March

13.00 - 14.00

Amphithéâtre / Main Auditorium

FILMS FOR CERN

"Integrated circuits in large systems"

Colour Film in English produced by
Texas Instruments Ltd, Bedford G.B.

Duration : 45 minutes

Presented by : Fabrimex A.G.

Summary of content

Digital integrated circuits of the saturating variety work well in systems up to 50 packages per printed circuit board, and need almost no precautions when assembled with open wires for systems of 20 packages.

IC systems exceeding 50 packages require more carefully controlled lay-out and considerations of the wiring pattern dynamic behaviour. There may be line reflexions due to high rise and fall times and because of poor line matching. There may occur cross-talk between signal lines or from signal line to supply. Supply current spikes can create supply voltage spikes because of improper distribution of inductivity along the supply conductors.

The problems thus created can be controlled well enough to permit an unlimited quantity of ICs in one system. The film is introducing the concept of these problems, shows actual experiments and means to forecast behaviour within a given system.

Almost exclusive consideration is given in the film to the TTL-integrated circuits. These show a fairly constant output impedance for low and high level. The TI variety has in its input multi-emitter-transistor a built-in double sided clipping characteristic, which dissipates energy out of reflexion signals so well that within this IC system the problems of reflexions become so simplified to be reduced to routine considerations.

A graphic method for reflexion calculation is presented in the film. All important items can be documented to interested parties with a printed abstract.

Affaires Sociales/Welfare

RENCONTRES DE MIDI

Nous avons le plaisir d'annoncer la venue aux "Rencontres de Midi" de

Lundi, 20 mars
13.15 précises
Amphithéâtre

Monsieur Jacques CHAPPUIS
Président du Parti Libéral

Il présentera :

Pourquoi suis-je Libéral ?

ASSOCIATION DU PERSONNEL
F. Jeanmairet

SECTION DES AFFAIRES SOCIALES
P. Zumbach