

Mercredi 25 Novembre

PRESENTATION TECHNIQUE

10h00/12h00 - Salle 2-027, Bâtiment 73

ASU Composants SA (CH) propose la démonstration d'un système de câblage (USA) pour circuits imprimés, le Stitch-Wiring, en version manuelle pour la réalisation de prototypes. Ce procédé représente une alternative à l'utilisation de la technique multicouche dans laquelle les frais de développement et les délais constituent un handicap lors de la réalisation de prototypes et de petites séries.

Langues : Français (allemand et anglais possibles).

Renseignements : M. Diraison/FI/4585.

THEORETICAL SEMINAR

at 14.00 hrs - Theory Conference Room

'The first results on the hadron spectrum in lattice QCD'

by P. Hasenfratz/CERN

There have been several methods proposed recently for the numerical study of lattice QCD with quarks. The theoretical background will be summarized and the method of hopping parameter expansion combined with Monte Carlo simulation will be described. A critical analysis of the first results obtained with different methods will be given.

DD SEMINAR

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

'Program correctness'

by J. Reinfelds/Wollongong, Australia

The talk will survey the rapidly developing field of programming methodology. Programming methodology is an area of computing science that concerns itself with the development of theoretical and practical apparatus that facilitates the writing of correct programs. The notion of correctness as applied to programs has several different aspects. These will be discussed in general and the more interesting approaches will be discussed in detail. Dijkstra's assertion that debugging can only prove the presence of bugs but never their absence describes most clearly the motivation behind our current efforts in programming methodology.

Vendredi 27 Novembre

PRESENTATION TECHNIQUE

09h00/16h00 - Salle 2-027, Bâtiment 73

TVI-Télévision Industrielle SA (CH) propose en démonstration son matériel didactique 'Logidules' utilisé pour la formation technique et le développement en laboratoire dans le domaine des systèmes logiques.

Langue : Français.

Renseignements : M. Diraison/FI/4585.

Monday 30 November

ISR SEMINAR

at 14.30 hrs - ISR Auditorium
(Top floor of Building 30)

'A review of ISR physics'

by L. Camilleri/EP

EP SEMINAR

at 17.00 hrs - Auditorium

'Measurement of the positive D meson lifetime in a purely electronic photoproduction experiment'

by L. Foa/Univ. of Pisa

Thursday 3 December

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium

'The structure of charged currents'

by J.J. Sakurai/UCLA and MPI Munich

TRAINING AND **EDUCATION** **ENSEIGNEMENT**

ENSEIGNEMENT TECHNIQUE

Quelques cours de l'Enseignement Technique 1981-82 peuvent encore accueillir des participants. Ces cours commenceraient dans le courant du 1er trimestre de 1982. Ce sont notamment :

ATELIERS DE MATHEMATIQUES

L'Atelier de Mathématiques est ouvert à toute personne, quel que soit son niveau initial, désireuse de découvrir ou de redécouvrir les raisonnements simples (ou sophistiqués) qui conduisent à la mathématisation de problèmes courants ou professionnels. En outre, il donne l'occasion de se familiariser à l'utilisation des méthodes mathématiques et, à ce titre, offre la possibilité de se préparer à suivre efficacement d'autres cours de l'Enseignement Technique pour lesquels une certaine aisance dans la manipulation des techniques mathématiques est nécessaire.

Les travaux s'effectuent en petits groupes constitués en fonction des objectifs recherchés et/ou des connaissances initiales.

Durée du cours : 22 × 4 heures le mardi.

ELECTROMECHANIQUE II

Ce cours est destiné aux monteurs-mécaniciens ou aux techniciens-mécaniciens appelés à construire de l'appareillage électromécanique. Il suppose déjà certaines connaissances en électricité, notamment en ce qui concerne le fonctionnement et l'utilisation de composants électromécaniques courants (disjoncteur, relais, moteur,...) ainsi qu'en lecture de schémas électriques (connaissances équivalentes à celles acquises au Cours Electromécanique I).

Le programme du cours comporte l'étude des moyens de production et de distribution de l'électricité, des récepteurs courants (moteur, transformateur, etc.), ainsi que de la sécurité des installations et du personnel.

Durée du cours : 22 × 4 heures le mardi.

ANALYSE ET METHODES DE CONSTRUCTIONS MECANQUES

Ce cours est destiné au personnel des bureaux d'études et aux techniciens en mécanique qui désirent redécouvrir les principes physiques et mathématiques sur lesquels s'appuient toute analyse d'une réalisation d'un ensemble mécanique (statique et/ou dynamique).

Après quelques rappels concernant les unités physiques, les notions de travail et d'énergie, ainsi qu'une révision de certains chapitres concernant la résistance des matériaux et les éléments de machines, les participants ont à traiter des problèmes pratiques faisant appel à leurs connaissances en mécanique, hydraulique, électricité, etc. tout en utilisant des méthodes modernes de raisonnement et de calcul (mini-ordinateur).

Durée du cours : 22 × 4 heures le jeudi.

INITIATION AUX TECHNIQUES DU VIDE

Ce cours s'adresse à toute personne appelée à installer ou à faire fonctionner des ensembles comprenant des installations à produire ou à contrôler le vide. Il doit leur permettre de mieux comprendre les principes physiques appliqués à ces installations, d'en calculer quelques paramètres simples (conductance, vitesse et temps de pompage, taux de fuite, etc.) ainsi que de se familiariser avec le matériel employé (différents types de pompes, jauges, etc.).

Ce cours fait largement appel aux travaux pratiques sur des installations reproduisant les principaux moyens de création du vide et utilisant les instruments de mesure les plus courants.

Durée du cours : 8 demi-journées réparties sur 3 semaines.

Toutes les personnes qui désirent s'inscrire pour l'un ou l'autre de ces cours sont priées de prendre contact, avant le 7 décembre, avec le Secrétariat de l'Enseignement Technique (Mlle M. Duval - 4460) qui pourra également fournir toutes les informations complémentaires.

ENSEIGNEMENT GENERAL (Tél.2844)

Jeudi 26 Novembre

13h00/13h30 - Amphithéâtre

'Science pour Tous'

par R. Carreras

ACADEMIC TRAINING (Tel. 2844)

30 Novembre; 3, 7, 10, 14, 17 Décembre

11h00 - Amphithéâtre

'Statistique appliquée'

par P. Nuesch / EPF, Lausanne

1. *Traitement des données brutes.*
2. *Ajustement d'une loi (Goodness of fit).*
3. *Inférence statistique I : estimation ponctuelle et estimation par intervalle.*
4. *Inférence statistique II : tests d'hypothèses paramétriques et non-paramétriques.*
5. *Technique statistique I : principe des moindres carrés et régression linéaire simple et multiple.*
6. *Technique statistique II : analyse de variance à deux voies sans et avec interaction.*

L'accent de ce cours est placé sur les applications. Les méthodes et techniques élémentaires de la statistique moderne seront présentées et illustrées par des exemples pratiques.

December 1, 2, 4, 9, 11, 16, 18

11.00 hrs - Auditorium

'Longitudinal and transverse instabilities in storage rings'

by A. Hofmann and B. Zotter / CERN

In the introduction the basic dynamics of beam instabilities are treated in time and frequency domain with the beam surroundings being presented as a wake potential or as an impedance. The longitudinal and transverse instabilities of bunched beams are described to first order by Sacherer's integral equation. It gives the growth rates and frequency shifts of given modes of oscillation. In an extension of this theory, Laclare's method of finding the eigenvalues and Besnier's development in orthogonal polynomials are discussed. A brief treatment of the stability of continuous (unbunched) beams is used to introduce the concept of Landau damping. A strong interaction between the beam and its surroundings modifies the particle distribution and the modes of oscillation themselves and leads to potential well and turbulent bunch lengthening. After being first described in a simple, approximate way, these effects are treated within Sacherer's theory as coupling between different modes.

"ITALY AT CERN"

1 - 4 December
Administration Building
(Bldg. 60 - 1st floor)
10.00 hrs - 17.30 hrs (Friday 12.00 hrs)

Twenty-eight Italian firms will be presenting their latest technology at the "Italy at CERN" exhibition. This exhibition is being organized by I.C.E. Rome (Istituto Nazionale per il Commercio Estero).

We include here a summary of the products which will be on show or demonstrated by the companies' technical staff.

ADOLFO PASTA SpA
(PIRELLI GROUP)
Via Giovanni XXIII, 23
20098 S. GIULIANO M. (Milano)
Tel. : (02) 9848671
Telex : 32 1304 PASTA I

High temperature cables, cables and wires with special behaviour when exposed to fire (low toxicity - low fumes - low corrosion - fire resistant - fire retardant), coaxial cables for high frequency, standard (rg) and special type, control and signaling cables, radiation resistant cables, and all other special cables.

CABLEXPORT SpA
Via Vespucci, 2
20124 MILANO
Tel. : (02) 64421
Telex : 310135 PIREMI I -
314018 PIRECX I
Area manager for Europe :
A. Decorato (tel. 64422932)

Power, telecommunication and control cables, such as : LV, MV and HV power cables, radiation resisting cables, non-fire propagating cables, non-toxic and low smoke gas evolution cables, and cables for special applications.

FILIPPO FOCHI
Via Portanova, 3
40123 BOLOGNA
Tel. : (051) 267983/4/5/6
Telex : 511020 FOCHI I

Product line : construction and erection of steel structures, vessels, and piping systems for nuclear power plants.

Exhibited products : photographic panels.

FULGOR CAVI SpA
Via del Crocefisso
04100 BORGO PIAVE (Latina)
Tel. : 0773/481011
Telex : 680012 FULGOR I
Dr. Comini : Commercial Branch

Product line : power cables : for medium and high voltage, paper insulated mass impregnated, plastic, rubber or XLPE insulated - special purpose ship-wiring cable - signal cables - ACRS conductors for high tension overhead lines - enamelled copper winding wires - bare stranded conductors - telephone cable for trunk connection, coaxial pair and microcoaxial pair types - copper rod by continuous casting and rolling from cathodes - copper bare drawn wires - PVC granulated compounds for insulating and covering cables, rubber compounds for insulating and covering cables.

Exhibited products : photographic panels.

GILARDINI SpA - Divisione Flexider
Corso Romania, 501
10156 TORINO
Tel. : (0011) 2392
Telex : 221329 GILATO I
Gherardo Lavia : Export Manager

Product line : expansion joints, bellows type - metal bellows - flexible metal hoses - pipe spring supports - pipe rigid supports - industrial filters - shock absorbers.

Exhibited products : flexible metal hoses - pipe spring supports - shock absorbers.

**IND. POLITECNICA MERIDIONALE
IPM SpA**

Components Division
Via Rettifilo al Bravo, 90/92
80022 ARZANO (Napoli)
Tel. : (081) 7312033
Telex : 710518 IPM

Branch Office :
Via Mascheroni, 19
20145 MILANO
Tel. : (02) 4695613
Telex : 331604
Ing. Francesco Capaldi

ING. BRIZIO BASI & C.
Viale Monza, 198/200
20128 MILANO
Tel. : (02) 2572914 - 2573582
Telex : 313842 BASIMI I
A. Pierno : Export Manager

LABEN - DIVISIONE DELLA SIEL SpA
Via E. Bassini, 15
20133 MILANO
Tel. : (02) 2365551
Telex : 312451 LABEN I
Dr. Hamel

LA METALLI INDUSTRIALE SpA
Borgo Pinti, 99
50121 FIRENZE
Tel. : (055) 49741
Telex 571598 SMIFI I

LARES COZZI SpA
Via Roma, 88/92
20037 PADERNO DUGNANO (Milano)
Tel. : (02) 9181363 - 9181026
Telex : 330119 LARES I
Ugo Brandolino : Commercial Manager

Product line : tantalum and polyester professional capacitors - professional film capacitors such as styroflex, polycarbonate, polypropylene - hybrid thick and thin film circuits and electronic modules.

Exhibited products : thick and thin film hybrid circuits - tantalum capacitors - polyester film capacitors - polystyrene capacitors - polycarbonate capacitors - polypropylene capacitors - filters and interference suppressors - RC units.

Product line : vacuum pumps, gauges, valves - freeze drying, impregnation, insulating oils, treatment plants.

Exhibited products : plant for treatment under high vacuum of mineral insulating oil, model DOV 400 - oil sealed high vacuum rotary pumps, direct drive models BHS and BHD, single and double stage.

Product line : semiconductor detectors for alpha, X and gamma particularly devoted to small dimension gas cooled detectors - analog electronics for nuclear spectrometry, in particular for high rate and high resolution measurements or multiple acquisitions with thick film technology - high speed and high resolution analog-to-digital converters for spectrometry and multiacquisition - high and low voltage power supplies - laboratory and portable multichannel analyzers with 1 to 4K memory - microprocessed systems for data processing - multiparameter and multiacquisition systems with CAMAC interfaces - installed and portable monitoring and analysis systems - peripherals with relevant interfaces.

Exhibited products : multiacquisition systems - high resolution detecting and spectrometry chain - multichannel analyzers.

Product line : complete range of semis in copper and copper alloys, i.e. : mineral insulated heating cables (cables and elements) - mineral insulated thermocouples (cables and elements) - mineral insulated wiring cables - heat exchangers, copper tubes - copper stranded wires - superconducting wires and cables.

Exhibited products : mineral insulated heating cables (cables and elements) - mineral insulated thermocouples (cables and element) - mineral insulated wiring cables - heat exchangers copper tubes - copper stranded wires - superconducting wires and cables.

Product line : rigid circuit boards, one or two sided, with and without PTH - flexible circuit boards, one or two sided, with and without PTH - rigid multilayer boards - mixed rigid-flexible boards. Surfaces : nickel-gold, tin-lead reflowed, bright tin, solder mask, component printing - power supplies - TV tuners - FM tuners - storage units - infrared remote controls.

Exhibited products : tuners for radio frequency systems - tuner controls for radio frequency systems - power supplies - printed circuit boards without electronic components - printed circuit boards assembled with electronic components.

LA ZINCOCELERE SpA
Via Abate Bertone, 12
13042 CAVAGLIA (Vercelli)
Tel. : 0161/96195
Telex : 200039 ZINCO I
Ing. Panza : Sales and Marketing Director

MAGRINI GALILEO
Via L. Magrini, 7
24100 BERGAMO
Tel. : (035) 235444
Telex : 301535 MAGGAL I
Ing. Becci : Export Sales Manager

NORD ELETTRONICA SpA
Località Molino Vecchio
17041 ALTARE (Savona)
Tel. : (019) 584031/2/3/4
Telex : 271398
Sig. Ravasio : Sales Manager

OFFICINA ELETTROMECCANICA
LOVATO & C. SpA
Via Don E. Mazza, 12
24020 GORLE (Bergamo)
Tel. : (035) 340088
Telex : 334019 LOVATO I
Francesco Martinelli : Sales Office Manager

OFFICINE GALILEO SpA
Località Tomerello
50013 CAMPI BISENZIO (Firenze)
Tel. : (055) 89501
Telex : 570126 GALILE I
Giuseppe Di Napoli : Area Export Manager

OFFICINE MECCANICHE LATINA SpA
Via Nettunense km 7,200
00040 CECCHINA (Roma)
Tel. : (06) 9342151
Telex : 614568
Franco Cesarini : Area Manager

Product line : professional printed circuit boards : multilayers (more than 20 layers) - mass moulding - flexible - flexo rigid. Homologations : UL (USA), BPO (UK), CNET (F), IEC (I). Specifications : UL, MIL, IPC, IEC (TC 52), BS, DEF.

Exhibited products : professional printed circuit boards.

Product line : low oil content and magnetic and sulphur-hexafluoride (SF6) breakers for medium voltage - HV and EHV sulphur-hexafluoride (SF6) metal-clad switchgear - HV and EHV rotating and knee-type isolators - oil insulated and epoxy-resin insulated instrument transformers for medium voltage - HV and EHV instrument transformers - indoor and outdoor metal-clad drawout switchboards for L and MV - LV moulded case circuit breakers - LV switchboards, panel-boards and cabinets - protection relays and auxiliary relays.

Exhibited products : SF6 indoor circuit breaker type G I - moulded case circuit breaker - protection relays enclosed in cases.

Product line : professional printed circuit boards : double sided plated through holes. Homologations : UL (USA), BPO (UK), CNET (F), IEC (I). Specifications : UL, MIL, IPC, IEC (TC 52).

Exhibited products : professional printed circuit boards.

Product line : production of contactors, relays, switchboards, starters, electronic devices and commercialization on the world market of products including measuring instruments, control accessories, capacitors, microprocessors and speed controls of various Italian firms.

Exhibited products : push buttons, signal lamps, selectors - electronic timers and relays - microprocessors - contactors - measuring instruments - speed controls.

Product line : high vacuum components - hardness testers.

Exhibited products : high vacuum components : rotary pumps, one or two-stage, from 2 to 300 m³/h - mechanical boosters with atmospheric pressure start-up - diffusion pumps 'Isojet', matched baffles and traps - new high-performance diffusion pump 'Ecojet 63' - cryopump KT-1000 with closed helium-gas circuit - manual or remote controlled valves for forevacuum and high vacuum, in stainless steel - vacuum gauges from 6000 down to 10⁻¹¹ mbar, with digital or analog indication - pumping units : diffusion, cryogenic, turbomolecular.

Product line : equipment for aeronautic, military and nuclear industry.

Exhibited products : small equipment.

ORMIC
Via G. da Procida, 10
20149 MILANO
Tel. : (02) 315845/6/7
Telex : 333209 ORMIC I
Silvio A. IPPOLITI : Sales Manager

Product line : fork lift truck.

Exhibited products : Mod. W10-29 P, Lift stacker truck - Mod. B5, Lift stacker truck - Mod. DINO S.O., Scooter - Mod. DINO S.L., Scooter.

PIANELLI E TRAVERSA
FINANZIARIA SpA
Corso IV Novembre, 55
10090 CASCINE VICA (Torino)
Tel. : (011) 9591555
Telex : 210171 PTR I
Giuseppe Lodi

Product line : material handling and warehousing equipment and relevant engineering - special iron and light alloy castings, investment castings, drop forged steel parts.

Exhibited products : photographic panels.

POLETTI & OSTA SpA
Strada Provinciale Casale - Valenza km 0,5
15033 CASALE MONFERRATO
Tel. : 0142/74851
Telex : 210540 POLOST I
Francesco Carini : Export Manager

Product line : an integrated line of speed controls for the automation of operating machines, machine tool and graphic units and AC/DC converters for general purposes - isopower DC motors constant power - isoflux permanent magnet DC servomotors - automation, control and adjustment electronic systems for the automation of operating units.

Exhibited products : permanent magnet direct current servomotors, manufactured by isoflux servomotors SpA - torque from 1 up to 8.5 Nm - M execution to control motors speed - A execution, specific use as stabilized power supply - positioning systems to control motion (positor), executed for all operating machines, able to control from 1 up to 4 axes, simultaneously.

POLIVAR SpA
Via Naro9, 72 P.O. Box 111
00040 POMEZIA (Roma)
Tel. (06) 9121061
Telex : 611227
Dr. Guido Curiat : Export Manager

Product line : Cast acrylic sheets, bars, blocks, scintillators, light guides.

Exhibited products : acrylic scintillators, light guides.

PRO.CU.RA. IMPIANTI SRL
Via dei Guarneri, 14
20141 MILANO
Tel. : (02) 5390281
Telegramma : PROCURAMA - Milano
Dr. Giovanni R. Matarrese

Product line : machines, gauges and equipment for vacuum freeze dried products - microwaves.

RACK PERUZZI SRL
Viale A. Volta, 3
10090 BRUINO (Torino)
Tel. : (011) 9086253 - 9086261
Telex : 211679 RACKRP I
Renato Peruzzi

Product line : 19" rack cubicle - console - working table - cabinet - chassis - bearing slides - several containers and accessories.

SEAS GETTERS SpA
Via Gallarate, 215
20151 MILANO
Tel. : (02) 306541/2/3
Telex : 331108 SEASGT I
Dr. L. Rosai : Marketing Manager

Product line : getters for evacuated electron tubes - gas sorbing devices.

Exhibited products : wafer panel WP 1250/2 - sorb-AC module getter pump - cylindrical getter pump type GP 50 W2F - gettering strip type ST 101/CTAM/30D and ST707/CTAM/30D.

SICILIANI EMILIO SpA
Via Vincenzo Bellini, 13
20095 CUSANO MILANINO (Milano)
Tel. : (02) 6196421
Telex : 331029 ESTEL I
A.S. Bernar : Sales Manager

Product line : electrical junction and connecting boxes - junction connecting waterproof composite boxes, complete with switchgears, lighting, warning, devices - plugs and socket, flat and torpedo type - coupling sockets under CEE 17 standards - sockets with locking safety device and fuse-holder - terminal strips - fuse-holders - panel connecting articles.

Exhibited products : as above.

SILENA SpA
SOC.IND.PER L'ELETTRONICA
AVANZATA
Via Negrolì, 10/a
20133 MILANO
Tel. : (02) 7590565 - 713871
Ing. Paolo Rizzacasa : Sales Manager

Product line : spectroscopy amplifiers - timing single channel analyzers - analog-to-digital converters - charge, amplitude and time converters - high-speed analog-to-digital converters - single input multichannel scaling units - display units - HV power supply - bin-power supply - Silena spectrum stabilizers - 4-Input mixer routing units.

Exhibited products : microprocessor-based pulse height multichannel analyzers - NIM-standard pulse height multichannel analyzers - portable pulse height multichannel analyzers - high-speed analogue-to-digital converters, 8192 channels, 400 mHz - time, charge, amplitude converters with 2048 channels - high-resolution spectroscopy amplifiers - HV power supplies - installed gamma radiation monitoring systems.

SOCIETA' CAVI PIRELLI SpA
Via le Sarca, 202
20126 MILANO
Tel. : (02)64421
Telex : 310135 PIREMI I

Power, telecommunication and control cables, such as : LV, MV and HV power cables, radiation resisting cables, non-fire propagating cables, non-toxic and low smoke gas evolution cables, and cables for special applications.

CEAT CAVI SpA
Largo Regio Parco, 9
10100 TORINO
Tel. : (011) 26081
Telex : 221603 CEAT I

Power, telecommunication and control cables, such as : LV, MV and HV power cables, radiation resisting cables, non-fire propagating cables, non-toxic and low smoke gas evolution cables, and cables for special applications.

VARIAN SpA
Via F.lli Varian, 54
10040 LEINI' (Torino)
Tel. : (011) 9968086
Telex : 210228 VARSPA I
Luigi Bonaudo : Sales Engineer for CERN

Product line : high vacuum and ultra-high vacuum pumps, valves, flanges, fittings and accessory components - pressure measurement instrumentation - leak detectors - ultra-high vacuum pumping systems - vacuum coaters - vacuum furnaces - semiconductor processing equipment.

Exhibited products : ion pumps and controls - new titanium sublimation pump control unit and sublimation sources - new ionization gauge control unit '890-AR' and gauge heads - portable mass spectrometer leak detector '936-40 Porta Test', cart mounted - new portable leak detector 'Helium Spy 2000' for pressure tests - right angle and swing valves - UHV flanges and fittings - HV flanges components.

AUX UTILISATEURS DU MAGASIN GAZ

En application du nouveau Code de Sécurité pour les gaz inflammables, nous vous rappelons qu'à partir du 1er décembre 1981 (entrée en vigueur dudit Code), *les gaz industriels et expérimentaux inflammables* ne seront livrés que sur présentation d'une Demande de Matériel portant l'empreinte d'une Carte d'Utilisateur des Magasins revêtue de la mention XGAS. Ces cartes sont à demander aux Services Financier et Comptable (M. Muzelier) à l'aide du formulaire F9 du Code.

Division des Finances

TO USERS OF THE GAS STORE

In applying the new Safety Code for inflammable gases, we would like to remind you that from 1 December 1981 (application date for the Code) *inflammable industrial and experimental gases* will only be delivered against a Material Request stamped with a Stores Users Card on which is mentioned XGAS. These cards may be requested from the Financial and Accounting Services (M. Muzelier) by means of an F9 Code form.

Finance Division

ON RECHERCHE...

...pour le mois de décembre, une voiture pouvant assurer le transport d'une petite handicapée (surdité) d'Annemasse à Genève-Gare, le lundi et le vendredi autour de 8h00. Tél. Ed. Hantzberg / 2298-3182. Merci!

DISPARU

Un oscilloscope type 475DM44 a disparu de son atelier. La personne qui l'aurait 'subtilisé' sans préavis est priée de contacter H. Herbert/EP - Tél. 6448.

PROCHAIN CONCERT

Jeudi 3 décembre 1981 à 20 h Amphithéâtre du CERN

Récital

Aldo Ciccolini

Fr. Schubert

4 Impromptus op. 90

4 Impromptus op. 142

Sonate en si bémol maj., op. posthume

N.B. La vente des billets aura lieu *uniquement* le mardi 1 décembre au Bâtiment principal de 18 h à 20 h.

VACANT POSTS LIST ON 16th NOVEMBER 1981

<u>Post No</u>	<u>Vacancy No</u>	<u>Title</u>	<u>Grade</u>
EP-DI-058 *	80-82	Physicist	9

DD-ES-NP-181 *	81-64	Technician (Electronics)	6 B+
DD-SW-NI-235 *	81-63	Physicist or Mathematician (Programming)	8

PS-ML-VA-018	81-59	Technician (Vacuum)	6/7
PS-EI-KP-068 *	81-62	Technician (Electronics)	6 B+
PS-ML-WS-138	81-45	Workshop Supervisor (Mechanical)	9
PS-OP-MO-182 *	81-65	Technician (Accelerator Operation)	6 B+

SB-EE-EL-EM-074	81-67	Technician	7
SB-AC-TO-080 *	81-56	Sheet Metal Worker-Welder	4
SB-AC-083 *	81-54	Engineer or Physicist	8
SB-AC-CI-298 *	81-53	Photographer (Printed Circuits)	4
SB-DI-453 *	81-69	Administrative Clerk	4

DG-OF-TM-038 *	81-49	Translator	8/9 B+
DG-SE-AU-085 *	81-48	Internal Auditor	9

FI-SAP-AC-048	81-47	Administrative Clerk (Purchasing)	5

HS-DI-SC-125 *	80-34	Safety Engineer - Assistant Head of Emergency & Site Security Services -	8
HS-DI-SC-149 *	81-57	Fireman	4

B+ = Future Board

NOTE : Application for these vacancies are invited from staff members only, except where a post is marked with an asterisk indicating that external recruitment has been authorized.

For staff members who wish to apply for an internal job, but who hesitate because they do not have the qualifications required, adequate training could be envisaged. They are therefore encouraged to make their interest known.

Vacancies of other Organizations and Institutes are display on the notice-boards in the Administration Building and outside the Reception Office, Personnel Division.