

readout with delay lines and anode readout by charge division are discussed. Relations between the position resolution and the signal charge are given. It is shown that in order to achieve the best position resolution, both the readout electrode and its electronic terminations have to be optimized. Some practical design considerations and experimental results are given.

WEDNESDAY 14 AND THURSDAY 15 DECEMBER

#### CERN ENERGY SEMINAR

at 16.30 hrs - ISR Auditorium  
(Bldg.30 - 7th floor)

Wednesday 14 December :

"A review of technical and economic barriers to solar energy utilization"

Thursday 15 December :

"Solar energy - options and illusions"

by Aden Meinel and Marjorie Meinel,  
Joint speakers / Univ. of Arizona

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

Secrétariat : Tél. 2844

JEUDI 8 DECEMBRE

#### ENSEIGNEMENT GENERAL

de 13h00 à 13h30 - Amphithéâtre

"Science pour Tous", par R. Carreras.

Le prochain exposé aura lieu le jeudi 19 janvier 78.

MONDAY 5, TUESDAY 6,  
WEDNESDAY 7 AND THURSDAY 8 DECEMBER

#### ACADEMIC TRAINING

at 11.00 hrs - Theory Conference Room  
(Bldg.4 - 3rd floor)

"Pattern recognition and image processing"

by G.H. Granlund / Univ. of Linköping,  
Sweden

Abstract :

1. Introduction to pattern recognition.
2. Introduction to image processing.
3. Texture processing and edge and line detection.
4. Parallel picture processing.

## INFORMATIONS **GENERALES** **GENERAL INFORMATION**

#### NOUVELLE DOCUMENTATION

La brochure "CERN, Organizzazione europea per la ricerca nucleare", version italienne (SIS/PU 77-03) est disponible sur demande à la Section Publications du Service d'Information Scientifique.

A : Section Publications / SIS

CERN, Organizzazione europea per la ricerca nucleare

Nom :

Division :

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#### NEW DOCUMENTATION

The leaflet 'CERN, Organizzazione europea per la ricerca nucleare', Italian version (SIS/PU 77-03) is now available upon request from the Publications Section of the Scientific Information Service.

To : Publications Section / SIS

CERN, Organizzazione europea per la ricerca nucleare

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#### PARUTION DU BULLETIN DE FIN D'ANNEE - RAPPEL

En prévision des congés de fin d'année, veuillez noter que le Bulletin du vendredi 23 décembre couvrira les deux semaines 52/77 et 1/78. Le premier Bulletin de l'année 1978 (2/78) paraîtra le vendredi 6 janvier.

#### PUBLICATION OF THE BULLETIN FOR CHRISTMAS AND NEW YEAR - REMINDER

Because of the Christmas and New Year holidays, please note that the Bulletin of Friday 23 December will cover the weeks 52/77 and 1/78. The first Bulletin of 1978 (2/78) will appear on Friday 6 January.

#### NOUVEL APPAREIL DE RECHERCHE

Network on-call service - DD : Beep 981.

VACANT POSTS LIST ON 28th November 1977

| <u>Post No</u>      | <u>Vacancy No</u> | <u>Title</u>                                         | <u>Grade</u> |    |
|---------------------|-------------------|------------------------------------------------------|--------------|----|
| DG-RE-TM-031        | 77-89             | Translator (into German)                             | 8/9/10       |    |
|                     |                   | -----                                                |              |    |
| TH-SP-016 *         | 76-46             | Physicist                                            | 9/10         |    |
|                     |                   | -----                                                |              |    |
| EP-DI-SE-130        | 77-85             | Administrative Clerk                                 | 5            |    |
| EP-EL-IN-131        | 77-90             | Technician                                           | 7            |    |
| EP-RE-Reserve *     | 77-35             | Physicist                                            | 9            |    |
| EP-RE-LAB-Reserve * | 77-8              | Scanner (Night-Work)                                 | 3/4          |    |
|                     |                   | -----                                                |              |    |
| EF-DI-030/058       | 77-99             | Technician                                           | 6            |    |
| EF-DI-146 *         | 77-95             | Physicist                                            | 8/9          |    |
| EF-DI-144/373 *     | 77-106            | Electro-Mechanic or Electrician                      | 4/5          |    |
| EF-AT-149           | 77-64             | Mechanic                                             | 4/5          |    |
| EF-DI-207/305       | 77-73             | Mechanic                                             | 4/5          |    |
| EF-DI-324           | 77-103            | Technician                                           | 5/6          |    |
|                     |                   | -----                                                |              |    |
| DD-ES-088/104/136 * | 77-83             | Technician (Electronics)                             | 6            |    |
| DD-MS-OL/SW-OS-175* | 77-5              | Systems Programmer (Physicist)<br>or (Mathematician) | 8/9/10       |    |
| DD-CO-CO-Reserve *  | 77-62             | Technician (Senior Console Operator)                 | 5/6          |    |
|                     |                   | -----                                                |              |    |
| PS-DI-003           | 77-105            | Technical Assistant (Electro-Mechanical)             | 7/8          |    |
| PS-PO-MP-211        | 77-98             | Operator (PS Power Supplies)                         | 6            |    |
| PS-SM-MM-357        | 77-63             | Technician (Electro-Mechanical)                      | 7            | B+ |
| PS-COP-508          | 77-50             | Physicist or Electronics Engineer                    | 8/9          |    |
|                     |                   | -----                                                |              |    |
| ISR-OP-019          | 77-71             | Physicist or Engineer                                | 8/9          |    |
| ISR-BOM-033         | 77-75             | Electro-Mechanic                                     | 5/6          |    |
| ISR-RF-057 *        | 77-74             | Electronics or Electrical Engineer                   | 8/9          |    |
| ISR-OP-060          | 77-84             | Technician                                           | 6            |    |
| ISR-ES-062          | 77-88             | Physicist or Engineer                                | 8/9          |    |
| ISR-GE-DO-358       | 77-61             | Designer (Mechanical)                                | 6/7          |    |
|                     |                   | -----                                                |              |    |
| SPS-ARF-75          | 77-65             | Engineer (Electrical) or (Electronics)               | 9            |    |
| SPS-ARF-103         | 77-93             | Technician (Electrical) or (Electronics)             | 7            |    |
| SPS-SEL-133         | 77-92             | Technician (Electrical)                              | 6/7          |    |
| SPS-ARF-158         | 77-66             | Technician (Electrical) or (Electronics)             | 7            |    |
| SPS-AOP-166         | 77-80             | Technician                                           | 6/7          |    |
| SPS-EHY-251         | 77-94             | Technician (Electrical)                              | 6/7          |    |
| SPS-SFL-260         | 77-96             | Operator (Refrigeration and air conditioning)        | 6            |    |
| SPS-AES-270 *       | 77-100            | Electronic Equipment Assembler                       | 5            |    |
| SPS-EBP-304         | 77-102            | Technical Assistant (Electronics)                    | 7/8          |    |
| SPS-EBP-344         | 77-101            | Technical Assistant (Electronics)                    | 7/8          |    |
| SPS-ACC-357 *       | 77-91             | Technician                                           | 6            |    |
| SPS-ACC-370         | 77-86             | Technician (Electrical) or (Electronics)             | 7            |    |
| SPS-EBP-402         | 77-78             | Technician (Electromechanical)                       | 7            |    |
| SPS-EBP-421         | 77-104            | Technical Assistant                                  | 7/8          |    |
| SPS-ARF-504 *       | 77-57             | Technician (Electrical) or (Electronics)             | 6            |    |
| SPS-SEL-505 *       | 77-87             | Electrician                                          | 5            |    |
|                     |                   | -----                                                |              |    |

|                    |       |                                |     |    |
|--------------------|-------|--------------------------------|-----|----|
| FI-SAP-MA-140      | 77-97 | Technician                     | 7   |    |
| FI-SAP-AC-165      | 77-60 | Administrative Clerk           | 5   |    |
|                    |       | -----                          |     |    |
| PE-SO-SL-50 *      | 77-79 | Administrator (Social Worker)  | 7/8 |    |
|                    |       | -----                          |     |    |
| HS-RP-RA-Lab-002   | 77-69 | Technician                     | 5/6 |    |
| HS-RB-Lab-006      | 77-81 | Technician                     | 5   |    |
| HS-RP-RS-036/148 * | 77-68 | Technician (Radiation Control) | 5/6 |    |
| HS-DA-149          | 77-82 | Administrative Assistant       | 6/7 | B+ |

B+ = Future Board

**NOTES :** Applications for the above vacancies are invited from staff members and supernumeraries only, except where a post number is marked with an asterisk indicating that external recruitment has been authorized.

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

#### REINTEGRATION - Sécurité sociale française

La prochaine permanence de la Sécurité sociale française au CERN aura lieu le

mardi 6 décembre de 14h00 à 16h00  
salle de conférence No.2 - 1er étage - Bât.5.

Les personnes intéressées sont priées de s'annoncer au Secrétariat des Affaires sociales (2486) qui tient également à leur disposition une liste des permanences tenues dans les Départements de l'Ain, de la Savoie et de la Haute-Savoie.

Service des Affaires sociales /  
Division du Personnel

#### REALISTIC FILM SHOW

The Lyon Fire Brigade, in collaboration with O.R.T.F., has made a film mainly with an amateur cameraman. The scenes are real and frightening, but shows clearly what a fire brigade's daily duties are.

PLEASE, DO NOT BRING CHILDREN.

Shows at noon Monday 5th, Tuesday 6th and Wednesday 7th December, in the Auditorium (Administration Building).

General Services / HS Division

#### PROJECTION DE FILM "PRIS SUR LE VIF"

La Brigade du Feu de Lyon, en collaboration avec l'O.R.T.F., a tourné un film avec un cameraman amateur. Les scènes sont réelles et assez effrayantes, mais montrent clairement ce que sont les devoirs d'une Brigade du Feu quotidien.

PRIERE DE NE PAS AMENER LES ENFANTS.

Les séances auront lieu les lundi 5, mardi 6 et mercredi 7 décembre dans l'amphithéâtre (Bâtiment de l'Administration).

Services Généraux / Division HS

#### SECURITE EP

La 3ème et dernière conférence du cycle "Sécurité dans le contexte de la recherche" sera présentée par M. P. Perilhon du CEN de Grenoble, à 15h00, le

lundi 5 décembre 1977 à l'amphithéâtre.

Sujet : "Analyse des risques".

#### EP SAFETY

Mr. P. Perilhon of CEN, Grenoble, will give the third lecture of the series on 'Safety in Research Environment' at 3 p.m., on :

Monday 5th December 1977 in the Auditorium.

Subject : 'Risk Analysis'.

## concerts publics du cern

### *Ensemble de cuivres Saint Jean*

De Venise aux Alpes suisses



Musiques du 16<sup>e</sup> au 20<sup>e</sup> siècle

amphithéâtre du cern  
mardi 6 décembre à 20h30

Oeuvres de : A. Gabrieli, P. Lappi, G.B. Grillo,  
Anonymes 18e s., P.D. da Bergamo, etc.  
pour : cuivres, percussions, orgue, cor des Alpes  
Location : G. Adam SPS 4813