



**ORGANISATION EUROPEENNE POUR LA RECHERCHE  
NUCLEAIRE**  
**EUROPEAN ORGANISATION FOR NUCLEAR RESEARCH**  
Laboratoire Européen pour la Physique des Particules  
European Laboratory for Particle Physics

## **The 1999 CERN School of Computing**

**Stare Jabłonki, Poland, 12-25 September 1999**

The 1999 CERN School of Computing is organised by CERN, in collaboration with Warsaw University and the Department "Internet for Schools" of the Foundation in Support of Local Democracy.

### **Date and Place of the School**

The Twenty-second CERN School of Computing will be held in the Hotel Anders, Stare Jabłonki, Poland, from Sunday, 12 September to Saturday, 25 September 1999.

Stare Jabłonki is situated in the very attractive Mazurian Lake area of Poland, some 220 kms north of Warsaw. The Hotel Anders is a complex of several buildings, and is situated in a wooded area on Lake Szelag Maly. The Hotel Anders has many facilities<sup>1</sup> such as: lounge bar, summer snack-bar, billiards, sauna, mountain bikes, tennis court, volley-ball and football pitches, solarium, sauna, jacuzzi, swimming pool, table tennis, horse-riding, etc.

### **Participation**

The School is open to postgraduate students and research workers with a few year's experience in elementary particle physics, in computing or in related field. The number of participants will be of the order of 80, mostly from the CERN Member States or from laboratories closely associated with CERN, but a few may come from within countries which are not Member States of CERN.

Personal contacts and informal discussions among the participants during leisure time are an important aspect of the School. For this reason, participants are asked to note that they should not be accompanied by family members or friends.

### **Accommodation**

Participants will be accommodated in the Hotel Anders, either in the main building or in one of the nearby annexes. All those participating in the School will be lodged in comfortable double rooms with private bathrooms.

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1. The following are free of charge to participants: swimming pool, jacuzzi, sauna, table tennis, billiards.

## **Cancellation**

The Advisory Committee reserves the right to refuse reimbursement of part or all of the fee in the case of late cancellation. However, each case of cancellation would be considered individually.

## **Replacement**

In all cases of withdrawal or cancellation, whether last-minute or otherwise, the choice of a replacement, if any, will lie entirely with the Advisory Committee and not with the laboratory concerned.

## **Advisory Committee**

|                  |  |                        |
|------------------|--|------------------------|
| W. Carena        | CERN, Geneva                           |                        |
| S. Cittolin      | CERN, Geneva                           |                        |
| F. Etienne       | CPPM, Marseille                        | (Chairman)             |
| F. Flückiger     | CERN, Geneva                           |                        |
| L.O. Hertzberger | University of Amsterdam, Amsterdam     |                        |
| A.J.G. Hey       | University of Southampton, Southampton |                        |
| R. Jones         | CERN, Geneva                           |                        |
| G. Kellner       | CERN, Geneva,                          |                        |
| J. May           | CERN, Geneva                           |                        |
| P. Palazzi       | CERN, Geneva                           |                        |
| J. Turner        | CERN, Geneva                           | (School Administrator) |
| C. Vandoni       | CERN, Geneva                           | (Scientific Secretary) |
| D.O. Williams    | CERN, Geneva                           |                        |

## **Local Organising Committee**

|                 |   |             |
|-----------------|---|-------------|
| Z. Ajduk        | Warsaw University, Warsaw                 |             |
| K. Doroba       | Warsaw University, Warsaw                 |             |
| M. Krzyżanowski | Dept. "Internet for Schools" FRDL, Warsaw |             |
| J. Gajewski     | Warsaw University                         | (Chairman)  |
| S. Rudnik       | Dept. "Internet for Schools" FRDL, Warsaw | (Secretary) |
| R. Sosnowski    | Institute for Nuclear Studies, Warsaw     |             |
| A. Wróblewski   | Warsaw University, Warsaw                 |             |

## **Enquiries and Correspondence**

All enquiries and correspondence related to the School should be addressed to:

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total students 44 + 1 also arrived on 13th  
 (45)

44 students  
 45 students

Scientific Programme 1999  
 Software Building; LHC Experiments Data Communication & Data Processing Systems; Internet Software Technologies; Advanced Topics

| Sun. 12 Sep.         | Mon. 13 Sep.     | Tue. 14 Sep.  | Wed. 15 Sep.                                  | Thur. 16 Sep.   | Fri. 17 Sep.  | Sat. 18 Sep.                          |
|----------------------|------------------|---|---|---|---|---------------------------------------|
| Registration All Day | Opening Ceremony | LHC Experiments Data Communication & Data Processing Systems<br>S. Cittolin | Software Building Software Design<br>R. Jones | Software Building Data analysis & visualisation<br>B. Ferrero-Merlino | Internet Software Technologies Agents in Java<br>M. Dönszelmann | Software Building Wrap-up<br>R. Jones |
| 10.30                | 10.30            | 5   | 9   | 12  |   |                                       |
| 11.00                | 11.00            | 6   | 10  | 13  | 16  | 18                                    |
| 11.30                | 11.30            |   |   |   |   |                                       |
| 12.30                | 12.30            | 7   | 11  | 14  |   | 19                                    |
| 12.45                | 12.45            |   |   |   |   |                                       |
| 14.30                | 14.30            | 8   | 11  |   |   |                                       |
| 15.30                | 15.30            |   |   |   |   |                                       |
| 16.00                | 16.00            |   |   |   |   |                                       |
| 17.00                | 17.00            |   |   |   |   |                                       |
| 17.00                | 17.00            |   |   |   |   |                                       |
| 18.00                | 18.00            |   |   |   |   |                                       |
| 18.30                | 18.30            |   |   |   |   |                                       |
| 19.30                | 19.30            |   |   |   |   |                                       |
| Dinner               | Dinner           | Dinner  |   | Dinner  | Dinner  | Dinner                                |
|                      |                  |   | arr: 22.00                                    |   |   |                                       |

11.00

13.15  
15.00

deadline 1st Ex.  
13th 15.30

deadline for 2nd Ex.  
16th 18.00

Mark go to give  
1 extra talk  
on WIRED  
and display a  
Java

30 mins

21.40  
16

28  
10.10  
38.50

37.00  
18

|               | Sun. 19 Sep.      | Mon. 20 Sep.   | Tue. 21 Sep.   | Wed. 22 Sep.   | Thur. 23 Sep.  | Fri. 24 Sep.   | Sat. 25 Sep. |
|---------------|-------------------|--|--|--|--|--|--------------|
| 09.00 - 10.00 | Excursion all day | Internet Software Technologies<br>M. Dönszelmann             | Advanced topics<br>A.J.G. Hey<br>Quantum Computing/2                                 | Internet Software Technologies<br>Advanced Web: XML, Streaming Media and Collaboratory Applications<br>M. Podgorny | Advanced topics<br>Mass storage challenge<br>L. Robertson  | Internet Software Technologies<br>Advanced Web: XML, Streaming Media and Collaboratory Applications<br>M. Podgorny | Departure    |
| 10.00 - 11.00 |                   | Internet Software Technologies Exercises/1<br>M. Dönszelmann | Advanced topics<br>Mass storage challenge<br>L. Robertson                            | Internet Software Technologies Exercises/6<br>M. Dönszelmann   | Advanced topics<br>Introduction - Mass Storage Systems at CERN<br>F. Gagliardi                                     | Advanced topics<br>CERN experience with HPSS<br>F. Gagliardi   |              |
| 11.00         |                   | Coffee   | Coffee   | Coffee   | Coffee   | Coffee   |              |
| 11.30 - 12.30 |                   | Internet Software Technologies Exercises/2<br>M. Dönszelmann | Internet Software Technologies<br>Web-based transaction technologies/1<br>B. Ibrahim | Internet Software Technologies Exercises/7<br>M. Dönszelmann   | Internet Software Technologies<br>Wrap-Up<br>M. Dönszelmann  | Internet Software Technologies<br>Advanced Web: XML, Streaming Media and Collaboratory Applications<br>M. Podgorny |              |
| 12.30         |                   | Lunch  | Lunch  | Lunch  | Lunch  | Lunch  |              |
| 14.00 - 15.30 |                   | Free time  | Free time  | Excursion<br>14.00-23.00   | Internet Software Technologies Exercise<br>M. Podgorny   | Student Session  |              |
| 15.30         |                   | Coffee   | Coffee   |  | Coffee   | Closing Session  |              |
| 16.00 - 17.00 |                   | Internet Software Technologies Exercises/3<br>M. Dönszelmann | Internet Software Technologies<br>Web-based transaction technologies/2<br>B. Ibrahim |  | Internet Software Technologies<br>Advanced Web: XML, Streaming Media and Collaboratory Applications<br>M. Podgorny | Football (to be confirmed)<br>Return Match<br>Titos' Titans<br>vs<br>Gonzalo's Goddesses                           |              |
| 17.00 - 18.00 |                   | Internet Software Technologies Exercises/4<br>M. Dönszelmann | Internet Software Technologies<br>Web-based transaction technologies/3<br>B. Ibrahim |  | Internet Software Technologies Exercises/1<br>B. Ibrahim   |  |              |
| 18.00         |                   | Break  | Break  |  | Break  |  |              |
| 18.30 - 19.30 |                   | Internet Software Technologies Exercises/5<br>M. Dönszelmann | Internet Software Technologies<br>Web-based transaction technologies/4<br>B. Ibrahim |  | Internet Software Technologies Exercises/2<br>B. Ibrahim   |  |              |
| 20.00         |                   | Dinner   | Dinner   | Dinner   | Dinner   | Barbecue   |              |
|               |                   |  | Evening Lecture<br>Feynman and Computation<br>A.J.G. Hey                             |  | A. Wroblewski<br>Physics in the 1900's<br>Evening Lecture  |  |              |