Overview of the 2003 CERN School of Computing held in Krems an der Donau, Austria

Introduction

The 26th CERN School of Computing took place at the Donau University, Krems a.d. Donau, Austria from 24 August to 06 September. The School was organized in collaboration with the Institut für Hochenergiephysik (HEPHY) (Österreichische Akademie der Wissenschaften, Vienna and the Donau Universität, Krems a.d. Donau, Austria.

The School was opened in the presence of:

Mag. Wolfgang Derler, Deputy Mayor and Councillor for Cultural Affairs.

Dr. Johann Günther, Vice President, Head Department of Telecommunication, Information and Media, Donau University

Dr. Meinhard Regler, Deputy Director, HEPHY

Dr. Wolfgang von Rüden, Division Leader, Information Technology, CERN

Dr. Rudi Frühwirth, HEPHY (Chairman of the Local Organising Committee).

Dr. François Flückiger, School Director, IT Division CERN.

The opening session was chaired by the School Director.

Pattie McBride, Advisory Committee member/Track Coordinator and Andreas Pfeiffer (Track Coordinator/Lecturer) attended for the whole period of the School. Heinz Stockinger, Track Coordinator/lecturer attended the second week.)

The School was directed by François Flückiger.

P. Martucci (AC member), IT-PS group, was the Technical Manager of the School and was assisted by Agustin Palacios-Laloy, IT Summer Student. They ensured a smooth running of the computing infrastructure before and during the School with excellent support from the Local Organizers' Technical team (Winni Mitaroff and Wolfgang Waltenberger, assisted by Gerald Richter who was also a student at the school).

Administration was managed by Jackie Franco-Turner, with invaluable support from Ingrid Bauer and Romana Figl from the Donau University. The administration of the School went extremely smoothly due mainly to the excellent preparatory work by the local organizing committee. Rudi Frühwirth, Chairman of the Local Organising Committee, is to be congratulated on his very hard work and efficient organization.

Students

There were 89 Applications.

11 cancelled due to lack of funds, 5 cancelled for unspecified reasons, 3 were refused due to incomplete application

There were 2 no-shows.

68 students attended. The 68 students were of 25 different nationalities from 39 different Institutes (22 students from CERN). (see table below).

First Name	J		Institute	City	Country	
Eric	Neilsen	American	1	Fermi National Accelerator Laboratory	Batavia	USA
Rene	Donner	Austrian	5	CERN	Geneva	Switzerland
Andreas	Wildauer	Austrian		Institut fuer Experimentalphysik	Innsbruck	Austria
Matthias	Fuegger	Austrian		Institut fuer Hochenergiephysik	Vienna	Austria
Gerald	Richter	Austrian		Institute for High Energy Physics	Vienna	Austria
Andreas	Salzburger	Austrian	1	University of Innsbruck	Innsbruck	Austria
Vandy	Berten	Belgian	1	Universite Libre de Bruxelles	Bruxelles	Belgium
Atila	Alves Neves	Portuguese	1	Instituto Superior Tecnico	Lisboa	Portugal
Matthew	Noy	British	2	Imperial College London	London	UK
Alasdair	Earl	British	1 7	University of Edinburgh	Edinburgh	UK
Mila	Katzarova	Bulgarian	1	Sofia University	Sofia	
Dehong	Zhang	Chinese	3	Fermi National Accelerator	Batavia	Bulgaria
Xiaomei	LI	Chinese	3	Laboratory		USA
				China Institute of Atomic Energy	Beijing	P.R.China
Yuehong	Xie	Chinese		Institute of High Energy Physics	Beijing	P.R.China
Helena	Larsen	Danish	1	CERN	Geneva	Switzerland
Andi	Hektor	Estonian	1	NICPB		Estonia
Jukka	Nysten	Finnish	2	Helsinki Institute of Physics	University of Helsinki	Finland
Lauri	Wendland	Finnish		Helsinki Institute of Physics	University of Helsinki	Finland
Michel	Christaller	French	5	CERN	Geneva	Switzerland
Karim	Bernardet	French		C.P.P.M.	Marseille	France
Sophie	Lemaitre	French		CERN	Geneve	Switzerland
Christophe	Raber	French		Institut Superieur d'Electronique de Paris	Paris	France
Frederic	Melot	French		Laboratory for Subatomic Physics and Cosmology	Grenoble	France
Helmut	Schmuecker	German	5	CERN	Geneva	Switzerland
Peter	Niessen	German		IIHE (ULB/VUB)	Brussels	
Bengt	Wessling	German		Institut fuer Experimentalphysik der Universitaet Hamburg	Hamburg	Belgium Germany
Damian	Bucher	German		Institut fuer Kernphysik, Universitaet Muenster	Münster	Germany
Joanna	Weng	German		Institute for Grid Computing and e-sciences (GES)	Eggenstein- Leopoldshafen	Germany
Theodota	Lagouri	Greek	1	Aristotle University of Thessaloniki	Thessaloniki	Greece
Miklos	Kozlovszky	Hungarian	3	CERN	Geneve	Switzerland
udit	Novak	Hungarian		Eotvos Lorand University of Sciences	Budapest	Hungary
Famas -	Hauer	Hungarian	ŀ	University of West England	Bristol	UK
Francesco	Minafra	Italian	14	INFN, Dipartimento di Fisica dell'Università di Bari	Bari	Italy
Alessandro	Di Mattia	Italian	1	INFN - Sezione di Roma 1	Roma	Italy
Stefano	Piano	Italian	l	Universita degli studi di Trieste	Trieste	Italy
Alberto	Forti	Italian	İ	Universita degli studi di Udine	Udine	Italiy
Andrea	Ceccanti	Italian	-	Università di Bologna	Bologna	Tealer
Ciro	Donalek	Italian		University Federico II di Napoli	Napoli Napoli	Italy Italy
ommaso	Coviello	Italian		University of Bari - INFN	Bari	Italy

Laura	Bocchi	Italian		University of Bologna	Bologna	Italy
Giorgia	Lodi	Italian	1	University of Bologna	Bologna	Italy
Massimo	Camarda	Italian		Dipartimento di Fisica e	Catania	Italy
				Astronomia		
Andrea	Causarano	Italian	1	I.N.F.N.	Frascati (RM)	Italy
Sabrina	Argentati	Italian	1	I.N.F.N.	Frascati -	Italy
					Rome	
Mirko	Corosu	Italian	1	INFN	Genova	Italy
Alberto	Amato	Italian		Politecnico di Bari	Bari	Italy
Farida	Fassi	Maroccan	1	IFIC-Instituto de Física Corpuscular	Valencia	Spain
Kamran	Munir	Pakistani	1	NUST Institute of Information Technology	Rawalpindi	Pakistan
Piotr	Nyczyk	Polish	3	ACK Cyfronet AGH	Krakow	Poland
Jacek	Wojcieszuk	Polish	1	CERN	Geneva	Switzerland
Monika	Puchalska	Polish	1	Institute of Nuclear Physics	Krakow	Poland
Rui Pedro	da Silva Sampaio	Portuguese	3	Agência de Inovacio	Oeiras	Portugal
Nuno	Barros	Portuguese		FCUL (Faculty of Science of University of Lisbon)	Lisbon	Portugal
Alexandre	Sousa	Portuguese		Tufts University	Medford,	USA
Ovidiu	Achim	Romanian	1	CERN	Genève	Switzerland
Andrei	Soukharev	Russian	2	Budker Institute of Nuclear Physics	Novosibirsk	Russia
Kirill	Prokofiev	Russian		Physik-Institute Universität Zürich	Zurich	Switzerland
Ildefons	Magrans de Abril	Spanish	6	CERN	Geneva	Switzerland
Hector	Sanchez SanMartin	Spanish		CERN	Geneva	Switzerland
Hugo	Ruiz	Spanish	1	CERN	Geneve	Switzerland
Igor	Roman Marino	Spanish	1	CERN	Genève	Switzerland
Francisco	Martinez	Spanish		Institut de Física d'Altes Energies	Bellaterra (Cerdanyola del Valles)	Spain
Manuel	Diaz-Gomez	Spanish		Universite de Geneve	Geneva	Switzerland
Henrik	Tydesjo	Swedish	1	Lund University	Lund	Sweden
Meng- Hang	Но	Taiwanese	4	Computing Centre, Academia Sinica	Nankang, Taipei	Taiwan, ROC
Hurng- Chun	Lee	Taiwanese		Computing Centre, Academia Sinica	Nankang, Taipei	Taiwan, ROC
Zi-Hao (Claude)	Wang	Taiwanese		Computing Centre, Academia Sinica	Nankang, Taipei	Taiwan, ROC
Chih- Chiang	Chang	Taiwanese	.51	Computing Centre, Academia Sinica	Nankang, Taipei	Taiwan, ROC

For the second year running, an examination was offered at the end of school. 60 students registered for the exam and 53 passed.

Lectures and Exercises

The programme consisted of 30 hours of lectures and 22 hands-on exercises. Three of the lectures and two of the exercises were optional. Two evening lectures and two presentations were given.

Origin of lect	urers
CERN	5
Europe	7, of whom 2 were evening lecturers
Overseas	2

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					Thu. 28. Aug orph	Fri. 29.Aug.	Sat. 30.Aug.	
un. 24. Aug.		Mon. 25.Aug.	Tue. 26.Aug.	Wed. 27.Aug.	Breakfast	Breakfast	Breakfast	25+3
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-	09.00	Opening	ST-SA-L-1 3	AL-ES-L-1	ST-SE-L-1	Physics Reconstruction	Interactive	
	09.00	Ceremony	System Analysis	Introduction 1	Software	M Neumeister	Computing	
	09.55	Ceremony	P. Tonella	N. Neumeister	Engineering	N. Neumoister	Andreas Pfeiffer	
	09.55	1			B.Jacobsen o	AL-ES-L-4	ST-IC-E-2	. 37
1	40.05	Opening	ST-SA-L-2 L	AL-ES-L-2	ST-SE-L-2	Track Reconstruction	Interactive	4+
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	15.45	Techniques	Techniques		b	T. Todorov		4
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				shopping	Coffee	Coffee		
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	#	(optional)	System Analysis	1101	Vertex	Vertex Reconstruction		, exte
	17.10	Network QoS	P.Tonella	141	Reconstruction	M.Regier		6610
		Basics	THE RESIDENCE		M.Regler			Doaw
(4)		F.Fluckiger			Presentation	Transport to hotel		
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Fraktitusday groupphuto

Sun. 31.Aug.		Mon. 01 Sept.	Tue. 02 Sept.	Wed. 03 Sept.	Thu. 04 Sept.	Fri. 05 Sept.	Sat. 06 Sept.
Breakfast		Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
All Day Excursion	08.30	Transport from hotel	Transport from hotel	Transport from hotel	Transport from hotel	Transport from hotel	
Trip to Vienna	09.00	GT-GT-L1 Grid Technologies	GT-GT-L4 7	AL-AM-L-1 Adaptive methods,	AL-AM-L-2 Adaptive methods,	GT-FG-L1 US	
huie.	09.55	E.Laure H.Stockinger K.Stockinger	E.Laure H.Stockinger K.Stockinger	reconstruction A Strandlie	reconstruction A Strandlie	Status, Future C.Kesselman	
7.00	10.05	GT-GT-L2 Grid Technologies	GT-GT-L5 Grid Technologies	GT-GT-E5 Grid Exercises	AL-AM-E1 Adaptive methods,	GT-FG-L2 Open Grid Services,	Departure
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i stalling !	11.05	Coffee	Coffee	Coffee	Coffee	Coffee	
Mon	11.30	GT-GT-L3 Grid Technologies	GT-GT-L6 OT	GT-GT-E6 Grid Exercises	AL-AM-E2 Adaptive methods,	GT-WU-L1 2 X	
	12.25	E.Laure H.Stockinger K.Stockinger	E.Laure H.Stockinger K.Stockinger	E.Laure H.Stockinger K.Stockinger	reconstruction A Strandlie	E.Laure H.Stockinger K.Stockinger	
unch included	12.30	deadine	Lunch at Uni.	Lunch package.	Lunch at Uni.	Lunch at Uni.	0.40
in excursion	13.45	GI-GI-E1	GT-GT-E3	Excursion	GT-MP-E1 5 dec		
	10.40	Grid Exercises	Grid Exercises	<u>13.00-15.45</u>	Grid Mini-project	Grid Track Wrap-up	
	14.40	E.Laure H.Stockinger K.Stockinger	E.Laure H.Stockinger K.Stockinger	Boat trip to Melk	E.Laure H.Stockinger K.Stockinger	E.Laure H.Stockinger K.Stockinger	
×	14.50	GT-GT-E2	GT-GT-E4	<u>16.15-17.45</u>	GT-MP-E2	School Wrap-up	
	1-1.00	Grid Exercises	Grid Exercises	visit of abbey	Grid Mini-project 72	would conferred	+
	15.45	E.Laure H.Stockinger K.Stockinger	E.Laure H.Stockinger K.Stockinger		E.Laure H.Stockinger K.Stockinger	evan ce-that	15.45 Brefas
	15.50	Coffee	Coffee		Coffee	Coffee 16.30 and 16.50	16 h histo
	16.15 -	GT-NP-E1 (optional) Network Performance	GT-NP-E2 (optional) Network Performance	18.00 bus to Krems	Optional Examination	Transport back to hotel	1
	17.10	E.Laure H.Stockinger K.Stockinger	E.Laure H.Stockinger K.Stockinger				16.45 Leve
	17.25	Transport back to hotel	Transport back to hotel		Transport back to hotel	Free Time	16.43
	19.30	Free Time	Free Time		The state of the s	18.30 and 18.40	1215
Dinner and Jazz	20.00	Dinner, Restaurant Klinglhuber	Dinner, Restaurant Klinglhuber	Dinner in at Heuriger Zölner	Dinner, Restaurant Klinglhuber	buses to Gottweig	and 130
			tot ball 18.15		/	Cocktail 19.30	
		father?	Price 1830		2ndfrig pour??	Dinner and Dancing	
		Evening Lecture Mobility of our Society due to Information and Com- munication Technology J. Günther	- 7		, , ,		