

# P-ECFA / R-ECFA: Nomination of 2 members

August 2012/JPR

## Introduction

The decision regarding the Swiss representatives in ECFA and R-ECFA belongs to the CHIPP Plenary. The decision is taken on the basis of a recommendation of the Board.

## Proposal

At present, CHIPP (and Switzerland) is represented at ECFA by Th. Gehrmann (at R-ECFA and ECFA), and by X. Wu, M. Weber and T. Garvey (at P-ECFA). Two of them (Th. Gehrmann, X. Wu) have informed the Chair of their intention to step down from this function as per 31 December 2012. The call for nominations among the Board Members has resulted in three candidates for R-ECFA having received the largest number of nominations (in alphabetical order): G. Iacobucci, L. Rivkin, and R. Wallny.

For the P-ECFA, the nomination process has resulted in one candidate having received by far the highest number of nominations: O. Steinkamp (UZH).

All three candidates have indicated their willingness to serve in this function for the years 2013-2015. Their CVs are attached.

In addition to the two new members to be elected, T. Garvey will have to be confirmed for his second term as P-ECFA representative, whereas M. Weber will end his second term in December 2013. His replacement will have to be decided in one year's time.

**The Board** (in conformity with Article 19, litt. e) is requested **to recommend to the Plenary**:

- the election of G. lacobucci, L. Rivkin or R. Wallny for a first term (2013-2015) as R-ECFA representative,
- the election of O. Steinkamp for a first term (2013-2015) as P-ECFA representative, and
- the confirmation of T. Garvey for his second term as P-ECFA representative (2013-2015).

Required majority: simple

The CHIPP Chair will submit the names of the recommended candidates to the Plenary for decision.

# **Curriculum Vitae of Giuseppe Iacobucci**

(August 2012)

Birth:	June 20, 1960, San Valentino in Abruzzo Citeriore, Italy.
Education:	Laurea in Physics, 1985, University of Bologna, Italy. Mark: 110/110 cum laude Corso di perfezionamento in Fisica, 1986, University of Bologna
Positions:	INFN fellowship, May 1987 – April 1988 INFN researcher (tenured), May 1988 – Feb. 2000 DESY scientific associate, Oct. 1998 – June 1999 and Sept. 2001 – Aug. 2002 INFN senior researcher, March 2000 – March 2011 CERN scientific associate, September 2010 – March 2011 Professor, University of Geneva, April 2011 – present
Field of interest:	Experimental Particle Physics

# Scientific research activities:

# **1984 – 1987:** proton-proton interactions at the ISR (R422 experiment)

The R422 collaboration was made by approximately 30 physicists. Research activity:

- Calibration of the time-of-flight system of the experiment.
- Measurement of  $\Lambda^+_{c} D^-$  associated production cross section.

# 1986 – 2005: electron-proton interactions at HERA (ZEUS experiment)

The ZEUS collaboration was made by 450 physicists from 53 Universities and research Institutes. During this period I was resident for 12 years in the DESY laboratory in Hamburg. Selection of research activity:

- Design and optimization of the vertex drift chamber (VXD) of the ZEUS experiment.
- Analysis of the test-beam data of the VXD prototype and of the final detector.
- Implementation of the description of the VXD geometry, materials and test-beam results in the ZEUS Montecarlo simulation programme.
- Track reconstruction, alignment and calibration of the VXD.
- Co-author of the software programme to match track segments reconstructed by the tracking detectors.
- Measurement of  $D^{\boldsymbol{*}}$  and inelastic  $J/\Psi$  cross sections in photoproduction.
- Measurement of elastic vector-meson ( $\rho^{o}$ ,  $\omega$ ,  $\phi$ ,  $J/\Psi$  and Y) photoproduction.
- Measurement of total cross section and photon-diffractive dissociation in photoproduction.
- Co-editor of the ZEUS-experiment document on the HERA Luminosity upgrade.
- Measurement of leading proton production in deep-inelastic scattering using the ZEUS Leading-Proton Spectrometer to tag the scattered protons.

# 2008 – 2011: muon radiography of geological structures (MU-RAY project)

The MU-RAY project is an international collaboration aiming at high-resolution muon radiography of geological structures. I co-promoted this project and contributed with:

- Design of high-resolution telescopes for muon radiography of geological structures.
- Test of a system of extruded scintillators and fast wave-length shifting fibers read by silicon photomultipliers.
- Preparation of the first muon radiography of Mt. Vesuvius.

# 2005 – present: proton-proton interactions at the LHC (ATLAS experiment)

The ATLAS Collaboration is made by 3100 physicists from 174 Universities and research Institutes. Since 2005 I contributed to hardware, data analysis and managed paper publications. I am presently responsible for the physics programme of the ATLAS experiment upgrades and team leader of the University of Geneva group. Selection of research activity:

- Upgrade of 150 Resistive-Plate Chamber (RPC) modules of the ATLAS muon-trigger system.
- Responsible for the *in situ* test and certification of the ATLAS RPC modules.
- Supervision of the measurement of muon trigger efficiency and of the cross section for  $J/\Psi$  boson production in the dimuon channel.
- Chairman of the editorial board of the first ATLAS physics publication on the measurement of charged-particle multiplicities in minimum-bias events at  $\sqrt{s} = 900$  GeV.
- Internal review and final signoff of several journal papers and public notes.
- Loading and QA of the staves of the Insertable Barrel Layer (IBL).
- ATLAS physics case for LHC Phase I and Phase II upgrade running periods.
- Editor of the physics chapter of the ATLAS Letter of Intent for the LHC Phase I upgrade.

# Scientific and management responsibilities:

- Swiss National Contact Person, ATLAS Collaboration (since 2012).
- Team Leader of the University of Geneva ATLAS Group (since 2012).
- Chairman of the ATLAS experiment Upgrade Physics Committee (since 2011).
- Member of the ATLAS experiment Upgrade Steering Committee (since 2011).
- Team leader of the University of Geneva IBL group (since 2011)
- Member of the Board of CHIPP, the Swiss Institute of Particle Physics (since 2011).
- Member of the CERN Scientific Information Policy Board (2010 2011).
- Member of the ATLAS experiment Executive Board (2010 2011).
- Chairman of the Publication Committee of the ATLAS experiment (2009 2011).
- Co-promoter of the MU-RAY project (2008 2011).
- Member of the committee of the 2006 Ph.D. program for Fundamental and Applied Physics, University of Bologna.
- Member of the ZEUS experiment Executive Board (1997 2005).
- Member of the ZEUS experiment Planning Group (1997 2005).
- Member of the ZEUS experiment Editorial Panel (2000 2005).
- Deputy Spokesman of the ZEUS experiment (1997 1999).
- Convener of the heavy-flavour, the photoproduction and the diffractive physics-research groups of the ZEUS experiment (1993 1996 and 2001).
- Technical Coordinator of the vertex drift chamber of the ZEUS experiment (1995).
- Run Coordinator of the ZEUS Experiment (1993).

# **Organization of Scientific Events:**

- 1. ATLAS Collaboration meeting, Montreux, Oct. 1-5, 2012.
- 2. MU-RAY Workshop, Naples, Italy, Sept. 11-12, 2008.
- 3. Workshop on Deep-Inelastic Scattering, Bologna, April 27 May 1, 2001.
- 4. Workshop on the Structure of the Nucleon, Frascati, Italy, June 7 11, 1999.
- 5. Convener of the parallel session on Soft Physics and Diffraction, ICHEP96, International Conference of High-Energy Physics, Warsaw, Poland, July 1996.

# Summary of scientific publications:

Since 1986, author of 379 papers on peer-reviewed International Journals, 443 on the **INSPIRE** database.

INSPIRE citation summary (published only):	
total number of citations	18870
average citations per paper:	49.8
renowned papers (500+ cit.)	1
famous papers (250-499 cit.)	11
very well known papers (100-249 cit.)	40
well known papers (50-99 cit.)	55
known papers (10-49 cit.)	189
less known papers (1-9 cit.)	73
h-index	72

A full list of publications can be found in: http://inspirebeta.net/search?ln=en&ln=en&p=find+a+iacobucci%2C+g&action\_search=Search&sf=&so=d&rm=&rg=100&sc=0&of=hcv

# **CIRRICULUM VITAE**

Swiss Federal Institute of Technology Lausanne (EPFL)+Paul Scherrer InstitutFax +	-41-56-310-3214 -41-21-693-0476 -41-56-310-5090 id.Rivkin@psi.ch	
Honors: Fellow of the American Physical Society		
Education_		
	1985 1978	
Professional experience		
Board of Directors, Paul Scherrer Institute 2006 - pres Head of Department Large Research Facilities, PSI Professor of accelerator physics, EPFL		
Head of the Accelerator Development and Operation Division, PSI	2002 – 2006	
Swiss Light Source, member of the Project Management	1990 – 2002	
B-meson factory designs at PSI and CERN	1989 – 1990	
Damping Rings Systems Leader, Accelerator Department, SLAC	1988 – 1989	
Physicist, SLAC. Optics design and beam dynamics issues at the SLAC Linear Collider. Design of damping rings for the future linear colliders	1986 – 1988	
Visiting Scientist, CERN. Commissioning of the LEP Injector	1985 – 1986	
Research assistant, Caltech & SLAC. Commissioning of the damping ring for the SLAC Linear Collider. Design modifications for the positron damping ring	1982 – 1985	
Mini- $\beta$ projects at PEP, SLAC. Design and commissioning.	1980 – 1982	
Worked on the DELCO detector at PEP.	1978 – 1980	
Research assistant, Harvard University. Worked on neutrino experiments at Brookhaven National Laboratory and on design of axion search experiment.	1977 – 1978	
Committees and Services		
Compact Linear Collider (CLIC) Collaboration Board Chairman	2012 – present	
Sirius Machine Advisory Committee, LNLS, Campinas, Brazil	2012 – present	
Accelerator Research and Development (ARD) Initiative, Helmholtz Association 2011 of German Research Centers, Chairman of the Advisory Committee		
Science & Technology Facilities Council (STFC), Chairman of the Accelerator Review Panel	2011 – present	
Test Infrastructure and Accelerator Research Area (TIARA), Chairman of the Governing Council	2011 – present	
LNF Scientific Committee, Frascati INFN National Laboratories, Italy	2011 – present	
CERN Scientific Policy Committee	2011 – present	
Chairman of the MAX IV Machine Advisory Committee, Lund, Sweden	2010 – present	
Chairman of the DESY Machine Advisory Committee, Hamburg, Germany	2003 – 2010	
IRFU Scientific Council, CEA, France	2007	
SSRL Scientific Advisory Committee, SLAC, USA	2006 – 2008	
Chairman of EPS-AG 2008 Prizes Selection Committee	2006 – 2008	
Chairman of the Elected Board of the Interdivisional Group on Accelerators of 2002 – 2004 the European Physical Society, Member of the EPS Council		

Leonid Rivkin	CV page 2 of 2
International Linear Collider Machine Advisory Committee	2005 – 2007
Editorial Board, Physical Review Special Topics – Accelerators and Beams	2001 – 2004
Chairman of the SOLEIL Project Machine Advisory Committee	2001 – 2006
Joint Universities Accelerator School Program Committee	2000 – 2012
Organizing Committee of the European Particle Accelerator Conferences	1994 – 2006
CERN Accelerator School Programme and Advisory Committees	1993 – present

# Personal

Date of Birth:12. August 1969Nationality:German

## **Professional Address:**

Institute of Particle Physics, ETH Zürich Schafmattstrasse 20 CH-8093 Zürich Switzerland Telephone:+41446334009 email: rainer.wallny@phys.ethz.ch

# Education

Ph.D.	University of Zurich, Switzerland, 2001 (physics).
	Dissertation: "A Measurement of the Gluon Distribution in the Proton and of the
	Strong Coupling Constant $\alpha_s$ from Inclusive Deep-Inelastic Scattering"
Diplom	University of Heidelberg, Germany 1996. (physics)
M.S.	University of Washington, Seattle, WA, USA, 1994 (physics)

# **Academic Prizes and Scholarships**

2008	Outstanding Teacher of the Year, UCLA Dept. of Physics and Astronomy.
2007	Outstanding Junior Investigator, U.S. Department of Energy.
2004, 2005, 2006	Departemental Teaching Awards, UCLA Dept. of Physics and Astronomy.
2001	'Auszeichnung' (distinction) for outstanding scientific work awarded
	by the University of Zürich.
1992 - 1993	Visiting Graduate Fellowship Univ. of Washington awarded by the
	'Studienstiftung des deutschen Volkes'.
1989 - 1996	Scholarship awarded by the 'Studienstiftung des deutschen Volkes'
	to outstanding High School Graduates, duration 7 years.

# **Current Position**

10/2010-Professor, Institute of Particle Physics,<br/>ETH Zürich, Switzerland.

# **Previous Positions**

07/2010 - 09/2010	Professor, Dept. of Physics and Astronomy,
	University of California, Los Angeles (UCLA).
07/2008-07/2010	Associate Professor, Dept. of Physics and Astronomy,
	University of California, Los Angeles (UCLA).
04/2003-06/2008	Assistant Professor, Dept. of Physics and Astronomy,
	University of California, Los Angeles (UCLA).
06/2001-03/2003	EP-Division Fellow on ATLAS, CERN, Geneva, Switzerland.

# **Scientific Activities**

# **Data Analysis**

Searches for the Higgs boson and Supersymmetry. Expertise in top quark physics and multivariate "matrix element" techniques; precision measurement of the top quark mass and discovery of electroweak single top production. Searches for rare processes such as Di-boson and Higgs boson production using 'matrix element' methods. Precision determination of parton distribution functions and the strong coupling constant  $\alpha_s$ .

## **Detector Development and Operations**

Silicon detector R&D and operations; drift chamber operations. Radiation hardness of poly- and single crystal CVD diamond. Test beam analysis of semiconductor prototypes. Detector calibration and reconstruction.

## Academic Service and Self-Governance

2011-	D-PHYS Strategy Committee, ETH Zürich
2003-2010	UCLA Experimental Elementary Particles Area Committee
2005-2008	UCLA Academic Affairs Policy Committee
2006-2010	UCLA Comprehensive Exam Committee
2006-2008	UCLA Committee on Reforming Teaching for Large Lower Division Undergraduate classes
2008-2010	UCLA Resources Committee
2009-2010	UCLA Physics Graduate Admissions Committee

## Managerial and Organizational Experience

Since 2010	Chair and member of internal review committees of several CMS publications
2006 - 2008	Leader of CDF Diamond group (beam abort system).
Since 2006	Chair of internal review committees of several CDF publications.
2004 - 2006	CDF Tracking group convenor.
2003 - 2004	CDF Silicon Detector Sub-Project Leader.
1996 - 1999	Detector Coordinator, Heidelberg Backward Drift Chamber of the H1 Detector.

## **Memberships in Professional Societies**

Member of the American, German and Swiss Physical Societies. Board member of the Physical Society, Zurich.

## **Other Synergistic Activities**

- Referee for Nuclear Instruments and Methods.
- Referee for Journal of High Energy Physics (JHEP).
- Referee for US Department of Energy grant proposals.
- Referee for the National Science Foundations of Slovenia.

Experimental particle physics is a collaborative effort of many individuals publishing with a common alphabetic author list. Total number of publications (inSPIRE, August 2012): **626**. Average citations per paper: **41**. The most important contributions during the last five years, as defined by primary intellectual input, are listed below.

The full list is available at http://cern.ch/rwallny/FullPublicationlistAug2012.pdf

# Primary authorship and/or major contributions to peer reviewed journals in the last 5 years

- 1. CDF Collaboration, A. Abulencia *et al.*, "Precise measurement of the top quark mass in the lepton+jets topology at CDF II," *Phys. Rev. Lett.* **99** (2007) 182002, hep-ex/0703045.
- 2. ATLAS Collaboration, A. Abdesselam *et al.*, "The ATLAS semiconductor tracker end-cap module," *Nucl. Instrum. Meth.* A575 (2007) 353–389.
- 3. CDF Collaboration, T. Aaltonen *et al.*, "Search for a Higgs Boson Decaying to Two W Bosons at CDF," *Phys. Rev. Lett.* **102** (2009) 021802, 0809.3930.
- 4. CDF Collaboration, T. Aaltonen *et al.*, "Measurement of the Single Top Quark Production Cross Section at CDF," *Phys. Rev. Lett.* **101** (2008) 252001, 0809.2581.
- 5. **CDF** Collaboration, T. Aaltonen *et al.*, "Search for the Production of Narrow *tb* Resonances in 1.9  $fb^{-1}$  of  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV," *Phys. Rev. Lett.* **103** (2009) 041801, 0902.3276.
- 6. CDF Collaboration, T. Aaltonen *et al.*, "Observation of Electroweak Single Top Quark Production," *Phys. Rev. Lett.* **103** (2009) 092002, 0903.0885.
- 7. **CDF** Collaboration, T. Aaltonen *et al.*, "Search for a Higgs Boson in  $WH \rightarrow \ell v b\bar{b}$  in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV," *Phys. Rev. Lett.* **103** (2009) 101802, 0906.5613.
- CDF Collaboration, T. Aaltonen *et al.*, "Inclusive Search for Standard Model Higgs Boson Production in the WW Decay Channel using the CDF II Detector," *Phys. Rev. Lett.* 104 (2010) 061803, 1001.4468.
- CDF Collaboration, T. Aaltonen *et al.*, "Observation of Single Top Quark Production and Measurement of |V<sub>tb</sub>| with CDF,", *Phys. Rev. D.* 82 (2010) 112005, 1004.1181.
- 10. **CMS** Collaboration, S. Chatrchyan *et al.*, "Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC", JHEP **1106**, 077 (2011). HEP entry
- CMS Collaboration, S. Chatrchyan *et al.*, "Measurement of the *tī* Production Cross Section in *pp* Collisions at 7 TeV in Lepton + Jets Events Using *b*-quark Jet Identification", *Phys. Rev. D.* 84 (2011) 092004, arXiv:1108.3773 [hep-ex] (Aug 2011). HEP entry
- CMS Collaboration, S. Chatrchyan *et al.*, "Measurement of B anti-B Angular Correlations based on Secondary Vertex Reconstruction at sqrt(s)=7 TeV", arXiv:1102.3194 [hep-ex] JHEP 1103, 136 (2011). HEP entry
- CMS Collaboration, S. Chatrchyan *et al.*, "Forward Energy Flow, Central Charged-Particle Multiplicities, and Pseudorapidity Gaps in W and Z Boson Events from pp Collisions at 7 TeV", arXiv:1110.0181 [hep-ex] (Oct 2011). Eur. Phys J. C72, 1939 (2012).

- 14. **CMS** Collaboration, S. Chatrchyan *et al.*, "Combined results of searches for the standard model Higgs boson in pp collisions at  $\sqrt{(s)} = 7$  TeV", *Phys. Lett.* **B710** (2012) 26-48.
- 15. **CMS** Collaboration, S. Chatrchyan *et al.*, "Search for the standard model Higgs boson decaying to a W pair in the fully leptonic final state in pp collisions at  $\sqrt{(s)} = 7$  TeV", *Phys. Lett.* **B710** (2012) 91-113.
- 16. **CMS** Collaboration, S. Chatrchyan *et al.*, "Search for the standard model Higgs boson decaying into two photons in pp collisions at  $\sqrt{(s)}=7$  TeV", *Phys. Lett.* **B710** (2012) 403-425.
- CMS Collaboration, S. Chatrchyan *et al.*, "Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC", arXiv:1207.7235 [hep-ex] Jul 2012, Accepted by Phys. Lett. B.
- 18. CMS Collaboration, S. Chatrchyan *et al.*, Search for physics beyond the standard model in events with a Z boson, jets, and missing transverse energy in pp collisions at sqrt(s) = 7 TeV. arXiv:1204.3774 [hep-ex] (Oct 2012), Submitted to Phys. Lett. B.
- 19. **CMS** Collaboration, S. Chatrchyan *et al.*, "Search for supersymmetry in hadronic final states using MT<sub>2</sub> in *pp* collisions at  $\sqrt{s} = 7$  TeV", arXiv:1207.1798 [hep-ex] (Jul 2012), Submitted to JHEP.

## Primary authorship and/or major contributions to other publications in the last 5 years

- 1. **RD42** Collaboration, M. Barbero *et al.*, "Development of diamond tracking detectors for high luminosity experiments at LHC,". CERN-LHCC-2007-002.
- 2. **RD42** Collaboration, M. Barbero *et al.*, "Development of diamond tracking detectors for high luminosity experiments at LHC,". CERN-LHCC-2008-005.
- 3. M. Mikuz et al. "Diamond detectors", PoS VERTEX2010, 024 (2010). HEP entry

## Published conference contributions in the last 5 years

- 1. R. Wallny, "Status of diamond detectors and their high energy physics application," *Nucl. Instrum. Meth.* **A582** (2007) 824–828.
- A. Sfyrla *et al.*, "Beam Condition Monitoring with Diamonds at CDF," *IEEE Trans. Nucl. Sci.* 55 (2008) 328–332.
- 3. R. Wallny, "Single top quark production at CDF," J. Phys. Conf. Ser. 110 (2008) 042032.
- 4. **CDF and D0** Collaborations, R. Wallny, "Recent Results from the Tevatron Experiments", *PoS* RADCOR2009 (2010) 001. http://pos.sissa.it/cgi-bin/reader/conf.cgi?confid=92
- 5. **CDF and D0** Collaborations, R. Wallny, "W and Z Properties from the Tevatron", proceedings of the Hadron Collider Physics Symposium (HCP2010), University of Toronto, Canada.

# OLAF STEINKAMP

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Physik-Institut der Universität Zürich Winterthurerstrasse 190 8057 Zürich phone +41 44 635 57 63 e-mail olafs@physik.uzh.ch

## EDUCATION

PhD in physicsDr.rer.nDiplom (master) in physicsUniversityCommunity ServiceParitätianAbiturSchulzer

Dr.rer.nat., Universität Bonn, 1993 Universität Bonn, 1990 Paritätischer Wohlfahrtsverband Bremen, 1982–1983 Schulzentrum an der Bördestrasse, Bremen, 1982

#### RESEARCH EXPERIENCE

#### Wissenschaftlicher Mitarbeiter, Physik-Institut der Universität Zürich (since 1999)

LHCb experiment at CERN:

- Coordinating and supervising physics analysis efforts of the Zürich group.
- Deputy project leader and project leader of the Silicon Tracker project (2001–2008): coordinated R&D effort that led to the definition of the detector layout and to the choice of the detector technology; was responsible for the detector construction in the four participating institutes and for the integration of the detector in the LHCb experiment.
- Member (since 2011) and chair (since 2012) of the LHCb Speakers' Bureau.
- Member of the LHCb editorial board (2000–2004).
- Representing the Zürich group in the LHCb collaboration board.

#### Postdoc, NIKHEF Amsterdam (1996–1999, stationed at DESY 1998–1999)

HERA-B experiment at DESY:

- Coordinated and supervised the production and quality assurance of detector modules for the tracking system at NIKHEF; designed production and quality assurance tools and set up a production line.
- Led the installation and commissioning of the first tracking stations in the experiment.
- Coordinated R&D programs at NIKHEF and DESY to validate drift gases.
- Coordinator of flavour-tagging and CP-violation physics study groups.
- Regularly represented the NIKHEF group in the HERA-B collaboration board.

#### Postdoc, CEA Saclay (1994–1996, with extended periods of time at CERN)

NA48 experiment at CERN:

- Responsible for the quality assurance of the NA48 wire chambers; set up test facilities at Saclay.
- Significant contributions to the successful installation and commissioning of the tracking system in NA48.
- Responsible for the operation of the tracking system during the first NA48 physics runs.
- Developed reconstruction algorithms for detector calibration and alignment, demonstrated that the design  $\pi^+\pi^-$  invariant mass resolution was achieved on the first data.

#### Research grants, CERN and INFN Genova (1993–1994)

Jetset (PS202) experiment at CERN:

• Investigated angular distributions for the reaction  $p\overline{p} \rightarrow \phi\phi$ .

#### PhD thesis, Forschungszentrum Jülich (1990–1993, stationed at CERN)

Jetset (PS202) experiment at CERN:

- Contributed to the quality assurance, installation and commissioning of a trigger hodoscope and was responsible for its operation during physics runs.
- Developed a full reconstruction chain for the reaction  $p\overline{p} \rightarrow \phi \phi \rightarrow 4K^{\pm}$ , including algorithms for track reconstruction, particle identification and kinematic fitting.
- Determined the  $p\overline{p} \rightarrow \phi \phi$  excitation function as a function of center-of-mass energy, produced the first consistent analysis of the accumulated data and the first PhD thesis of the experiment.
- Was responsible for the maintenance of the PS202 reconstruction software on CERN mainframe computers.

#### Diploma thesis, Forschungszentrum Jülich (1988–1990)

Development of an "Induction Drift Chamber" with FADC readout:

- Participated in the design and construction of prototype detectors.
- Designed and set up a test stand, using custom-made front-end electronics and commercial Flash-ADCs.
- Carried out laboratory tests and participated in a test beam at DESY.
- Developed analysis tools and evaluated the detector performance.

#### TEACHING EXPERIENCE

#### Lecture courses for graduate students

- "Experimental methods in particle physics"
- "Flavour physics"
- "Experimental Astroparticle Physics"

#### Lecture courses for undergraduates

- "Nuclear and particle physics"
- "Data analysis techniques"
- "Physics for medical students"

#### Supervision of bachelor, master and PhD students

• NIKHEF, Universität Zürich.

## LANGUAGES

#### German (native speaker), English, Dutch and French (fluent), Italian (basic knowledge).

## HOBBIES

Travelling, photography; music, movies.