

## Composition of the CHIPP EB: *Elections and re-elections*

June 2013/JPR

### Introduction

The CHIPP Executive Board is composed of up to four individuals: the Chair and one to three Vice-Chairs (Statutes Article 28.2). Their term of office is two years and renewable (Statutes Article 28.3). The Members of the CHIPP EB are elected by the Board (Article 27, litt. e of the Statutes).

### Proposals

One of the present EB members (K. Kirch) does not stand for re-election, because he finishes his mandate as chairman on 31 December 2013.

Both Olivier Schneider and Gilberto Colangelo have fortunately agreed to stand for re-election. Teresa Montaruli's term continues until end 2014.

For the open position as EB members, the call for nominations resulted in two names being supported by more than two Board Members. Out of these two, Rainer Wallny is available for election. His CV is attached.

Regarding the Chair, the election will take place at the Board meeting on 4 November 2013.

**The Board** (applying Article 27, litt. e of the Statutes) is requested:

- **to approve** the composition of the Executive Board as follows:  
Olivier Schneider and Gilberto Colangelo (for a second term 1 January 2014 – 31 December 2015), and Rainer Wallny (for a first term for the period 1 January 2014 – 31 December 2015).

Required majority: simple

# Curriculum Vitae - Rainer Wallny

---

## Personal

Date of Birth: 12. August 1969  
Nationality: 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,  
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 2012	Member of the CMS Finance Board and CERN RRB National Contact Physicist for CMS.
Since 2012	Member of the CMS SUSY Editorial Board.
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. Vertrauensdozent der Studienstiftung des deutschen Volkes.

### Other Synergistic Activities

- Referee for Nuclear Instruments and Methods.
- Referee for Journal of High Energy Physics (JHEP).
- Referee for the National Science Foundations of Slovenia, Italy and the US Department of Energy.
- Member of the DESY Physics Review Committee (PRC)

## Publications - Rainer Wallny (April 2008-March 2013)

---

Experimental particle physics is a collaborative effort of many individuals publishing with a common alphabetic author list. Total number of publications (inSPIRE, March 2013): **713**. Average citations per paper: **48**. **7** renowned papers (500+ citations, including Ph.D. thesis paper) **11** famous papers (250-499 citations), **55** very well known papers (100-249 citations). The most important contributions during the last five years, as defined by primary intellectual input, are listed below.

The full list of publications is available at <http://cern.ch/rwallny/FullPublicationlistMar2013.pdf>

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

1. **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.
2. **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.
3. **CDF** Collaboration, T. Aaltonen *et al.*, “Search for the Production of Narrow  $tb$  Resonances in  $1.9 \text{ fb}^{-1}$  of  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96 \text{ TeV}$ ,” *Phys. Rev. Lett.* **103** (2009) 041801, 0902.3276.
4. **CDF** Collaboration, T. Aaltonen *et al.*, “Observation of Electroweak Single Top Quark Production,” *Phys. Rev. Lett.* **103** (2009) 092002, 0903.0885.
5. **CDF** Collaboration, T. Aaltonen *et al.*, “Search for a Higgs Boson in  $WH \rightarrow \ell\nu b\bar{b}$  in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96 \text{ TeV}$ ,” *Phys. Rev. Lett.* **103** (2009) 101802, 0906.5613.
6. **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.
7. **CDF** Collaboration, T. Aaltonen *et al.*, “Observation of Single Top Quark Production and Measurement of  $|V_{tb}|$  with CDF,” *Phys. Rev. D.* **82** (2010) 112005, 1004.1181.
8. **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
9. **CMS** Collaboration, S. Chatrchyan *et al.*, “Measurement of the  $t\bar{t}$  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
10. **CMS** Collaboration, S. Chatrchyan *et al.*, “Measurement of B anti-B Angular Correlations based on Secondary Vertex Reconstruction at  $\sqrt{s}=7 \text{ TeV}$ ”, arXiv:1102.3194 [hep-ex] *JHEP* **1103**, 136 (2011). HEP entry
11. **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) .
12. **CMS** Collaboration, S. Chatrchyan *et al.*, “Combined results of searches for the standard model Higgs boson in  $pp$  collisions at  $\sqrt{s} = 7 \text{ TeV}$ ”, *Phys. Lett.* **B710** (2012) 26-48.

## Publications - Rainer Wallny (April 2008-March 2013)

---

13. **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.
14. **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.
15. **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, *Phys. Lett.* **B716** (2012) 30-61.
16. **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.  
*Phys. Lett.* **B716** (2012) 260-284.
17. **CMS** Collaboration, S. Chatrchyan *et al.*, "Search for supersymmetry in hadronic final states using  $MT_2$  in  $pp$  collisions at  $\sqrt{s} = 7$  TeV", *JHEP* 10 (2012) 018.
18. **CMS** Collaboration, S. Chatrchyan *et al.*, "Measurement of the  $t\bar{t}$  production cross section in  $pp$  collisions at  $\sqrt{s} = 7$  TeV with lepton + jets final states",  
*Phys. Lett.* **B720** (2013) 83-104.
19. **CMS** Collaboration, S. Chatrchyan *et al.*, "Observation of a new boson with mass near 125 GeV in  $pp$  collisions at  $\sqrt{s} = 7$  and 8 TeV"  
arXiv:1303.4571 [hep-ex] Mar 2013, 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-2008-005.
2. M. Mikuz *et al.* "Diamond detectors", PoS **VERTEX2010**, 024 (2010). HEP entry

### Published conference contributions in the last 5 years

1. A. Sfyrla *et al.*, "Beam Condition Monitoring with Diamonds at CDF," *IEEE Trans. Nucl. Sci.* **55** (2008) 328-332.
2. R. Wallny, "Single top quark production at CDF," *J. Phys. Conf. Ser.* **110** (2008) 042032.
3. **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>
4. **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.