Erik Eise van der Kraaij
Curriculum Vitae

PERSONAL DETAILS

Address: 95, Chemin du Reculet, 01630 Sergy, France
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Born: 10th of August 1980 in Kampen, the Netherlands
Nationality: Dutch
Gender: Male

WORK EXPERIENCE

2010 – now **CERN fellow in the Linear Collider Physics & Detector study group**

1. Run coordinator of CALICE Tungsten Hadronic Calorimeter testbeams
   - Experienced in setting up and coordinating test beam activities: testing, installation and operation of tests in the PS and SPS beam lines.
   - Gained good knowledge of the detector control systems & software tools, and currently analyzing the data.
   - Taught calorimeter functioning at 2011 EDIT School.
   - Involved in the implementation of the European AIDA project, aimed at creating infrastructures needed for detector and accelerator R&D.
2. Responsible for the muon detector workgroup
   - Designed new layout for the CLIC detector muon system.
   - Created the muon identification algorithm in PandoraPFA Particle Flow Algorithm.
   - Organized and coordinated meetings with representatives from different departments.
3. Researcher for vertex detector workgroup
   - Tested powerpulsing capabilities of the Timepix chip.
   - Studied different technologies for vertex detector sensors & electronics, and their possible implementation in a CLIC detector.

2005 – 2009 **Ph.D. student at Nikhef**

Title: "First Top Quark Physics with ATLAS – A Prospect"
Promotor: Prof. Dr. Stan Bentvelsen

- Set up independent analysis for energy scale calibration and cross section measurement in the top quark pair channel.
- On the team responsible for the Inner Detector evaporative cooling system.
- Teaching assistant for several courses.

1999 – 2005 **Waiter, dishwasher and assistant cook**
At restaurant Het Blauwe Theehuis and De Schutter in Amsterdam.

2001 – 2002 **Tutor**
Personal tutor for High School students in mathematics, physics and French, as employee of Recipienda Sapientia, Diemen, the Netherlands.

EDUCATION

1999 – 2005 **University of Amsterdam, the Netherlands**
M.Sc. Theoretical Physics
- Thesis: "Dynamical generated gauge degrees of freedom from a four fermi theory", supervised by Prof. dr. ir. F.A. Bais.
- Extra courses in astronomy and philosophy.

1998 – 1999 **University of Amsterdam, the Netherlands**
Propedeuse Physics & Astronomy (cum laude, 9.0)

1992 – 1998 **Almere College, Kampen, the Netherlands**
High School, A level. Best student of the year (9.0)

SCHOOLS & COURSES

2009 **Nyenrode Business Orientation Program**
in Breukelen, The Netherlands
2008 **CTEQ - MCnet Summer School**
in Debrecen, Hungary
2007 **Teaching training**
in Amsterdam, The Netherlands
2006 **Belgian-Dutch-German graduate school in particle physics**
in Bad Honnef, Germany
2005 **Belgian-Dutch-German graduate school in particle physics**
in Texel, Netherlands

SCHOLARSHIPS & AWARDS

2009 Nikhef award for accomplishing the Ph.D. in the time of the 4-year contract.
2005 "Pieter Beijer fonds" -grant for attending the CERN summerschool classes.

SELECTED PUBLICATIONS

2012 **Beam tests with the CALICE tungsten analog hadronic calorimeter prototype**
D. Dannheim, W. Klempt, E. van der Kraaij, under preparation.

2012 **Physics and Detectors at CLIC, Conceptual Design Report**
LCD study group, CERN-2012-003.

2011 **Physics performance for Scalar electrons, Scalar Muons and Scalar Neutrinos searches at CLIC**
M. Battaglia, J-J. Blaising, J. Marshall, J. Nardulli, M. Thomson, A. Sailer and E. van der Kraaij, LCD-Note-2011-018.

2011 **Muon system design studies for detectors at CLIC**
E. van der Kraaij, B. Schmidt, LCD-Note-2011-008.

2011 **Development of the PandoraPFAnew muon reconstruction algorithm**
E. van der Kraaij, J. Marshall, LCD-Note-2011-004.

2010 **R&D challenges of a CLIC vertex detector**
E. van der Kraaij, published in PoS VERTEX2010 (2010) 041.

2009 **PhD thesis: First Top Quark Physics with ATLAS – A Prospect**
E. van der Kraaij, at Univeristy of Amsterdam.

2008 **The evaporative cooling system for the ATLAS inner detector.**
D. Attree et al., published in JINST 3:P07003.

2008 **Combined performance tests before installation of the ATLAS Semiconductor and Transition Radiation Tracking Detectors.**
E. Abat et al., published in JINST 3:P08003.

2008 **On the missing transverse energy in semi-leptonic ttbar events using a kinematic fit.**
E. van der Kraaij and M. Vreeswijk
ATL-PHYS-INT-2008-045; ATL-COM-PHYS-2008-039

CONFERENCES & WORKSHOPS

2011 **CALICE Collaboration Meeting -** in Heidelberg, Germany
2011 **ILD Workshop 2011 -** in Orsay, France
2011 **Linear Collider Power Distribution and Pulsing Workshop -** in Orsay, France
2010 **International Workshop on Linear Colliders 2010 -** in Geneva, Switzerland
2010 **Vertex 2010 -** in Loch Lomond, Scotland
2006 **Tools for SUSY and the New Physics -** in Annecy, France

ADDITIONAL SKILLS

Computer skills: Linux, Mac OS, Windows.
C, ROOT, LateX, MS-Office, Mathematica.

Language skills:

	Spoken	**Written**
Dutch (mother tongue)	Excellent	Excellent
English	Excellent	Excellent
French	Excellent	Good
German	Moderate	Moderate

EXTRA-CURRICULAR ACTIVITIES

2010 – now	Member of the CERN boxing club.
2008	Helped set up the CERN boxing club.
1999 – 2005	Active member of the student association SSRA in Amsterdam. For two years president of a student circle: this implied leading a group of about 50 students, representing the group inside the association and organizing events.
Always	Like to travel and experience foreign cultures. Especially in Western Africa, Senegal.