

## Afgelegde doctoraten DNTK

### Academiejaar 2005-2006

Naam	Datum	Promotor(s)
Nevens Stijn	22/9/06	Sevrin A.
<i>Titel : Higher Derivative Corrections to the Abelian Born-Infeld Action using Superspace Methods</i>		

### Academiejaar 2006-2007

Lowette Steven	29/11/06	Tavernier S. and Jorgen D'Hondt
<i>Titel : B-Tagging as a Tool for Charged Higgs Boson Identification in CMS</i>		
Wijns Alexander	21/9/07	Sevrin A.
<i>Titel : Aspects of D-brane geometry and boundary superspace</i>		

### Academiejaar 2007-2008

Heyninck Jan	11/4/08	D'Hondt J.
<i>Titel : The CMS Top Quark Physics Potential with <math>1 \text{ fb}^{-1}</math> of Data</i>		

### Academiejaar 2008-2009

Lemaître Cedric	29/4/09	Bruyndonckx P.
<i>Titel : Use of machine learning algorithms for gamma detection in positron emission tomography</i>		
Hubert Daan	15/5/09	De Clercq C.
<i>Titel : Search with the AMANDA detector for neutralino dark matter in the Sun</i>		

### Academiejaar 2009-2010

Van Mulders Petra Gezamenlijk doctoraat UA	28/6/10	D'Hondt J. & Van Remortel N.
<i>Titel : Calibration of the jet energy scale using top quark events at the LHC</i>		
De Roo Frederik Gezamenlijk doctoraat UGent	1/7/10	Craps B. & Maenhout G.
<i>Titel : Geometrical Resolution of Spacetime Singularities</i>		

### Academiejaar 2010-2011

Maes Joris	4/11/10	D'Hondt J.
<i>Titel Estimation of the b-tag efficiency using top quarks at CMS</i>		
Wedrowski Mateusz	16/12/10	Bruyndonckx P.
<i>Titel : Artificial neural network based position estimation in positron emission tomography</i>		
Rizzo Alfio	22/12/10	De Clercq C.
<i>Titel : Search for neutralino dark matter with 6 years of data of the AMANDA-II neutrino telescope</i>		
Dang Jun	28/01/11	Bruyndonckx P.
<i>Titel : Contribution to the design of a multimodal PET / US imager for breast cancer</i>		

Li Zhi	5/5/11	Tavernier S. & Vandersteen G.
<i>Titel : Study of 3D position determination of the interaction point in monolithic scintillator blocks for PET</i>		
Staessens Wieland	27/6/11	Craps B. & Sevrin A.
<i>Titel : Aspects of Type II Superstring Theory Supersymmetric D-branes, T-duality and Holographic Thermalization</i>		

### **Academiejaar 2011-2012**

Abideh Jafari	Nov 2011	D'Hondt J. & Ardalan F.
<i>Titel : Measurement of the b-tagging efficiency in the CMS experiment with the first LHC Collisions</i>		
Maryam Zeilani	Nov 2011	D'Hondt J. & Haghighat M.
<i>Titel : Measurement of the Jet Energy Scale in the CMS experiment with the First LHC Collisions</i>		

**2011**

**C: articles in scientific journals with an international referee system**

Adiabaticity and emergence of classical space-time in time-dependent matrix theories

**Authors:** CRAPS BEN, EVNIN Oleg

**Reference:** Journal of High Energy Physics, vol.2011, n. 1, pp.130

**URL:** <http://www.springerlink.com/content/1351886476774ul0>

Fusion of line operators in conformal sigma-models on supergroups, and the Hirota equation.

**Author:** BENICHOU Raphael

**Reference:** JHEP, vol.2011, n. 1, pp.1 - 55,

**URL:** <http://arXiv.org/abs/arXiv:1011.3158>

Metastable Vacua in Superconformal SQCD-like Theories

**Authors:** AMARITI Antonio, GIRARDELLO Luciano, MARIOTTI Alberto, SIANI Massimo

**Reference:** JHEP, issue 2011, vol.1102, n. 092,

Perturbative stability of SFT-based cosmological models

**Authors:** GALLI Federico, KOSHELEV Alexey

**Reference:** JCAP 1105 (2011) 012,

Analysis of scalar perturbations in cosmological models with a non-local scalar field

**Authors:** KOSHELEV Alexey, Yu Vernov Sergey

**Reference:** Class. Quantum Grav., vol.28, n. 8,

Thermalization of Strongly Coupled Field Theories

**Authors:** Balasubramanian Vijay, BERNAMONTI ALICE, DE BOER Jan, COPLAND Neil Barclay, CRAPS BEN, Keski-Vakkuri Esko, Muller Berndt, Schafer Andreas, Shigemori Masaki, STAESSENS Wieland

**Reference:** Phys. Rev. Lett., issue 19, vol.106,

Measurement of Charm and Beauty Jets in Deep Inelastic Scattering at HERA

**Author:** ROOSEN ROBERT

**Reference:** Eur.Phys.J.C71, pp.1509

Measurement of the Diffractive Deep-Inelastic Scattering Cross Section with a Leading Proton at HERA

**Author:** ROOSEN ROBERT

**Reference:** Eur.Phys.J.C71, pp.1578

Search for Squarks in R-parity Violating Supersymmetry in ep Collisions at HERA

**Author:** ROOSEN ROBERT

**Reference:** Eur.Phys.J.C71, vol.1572,

Measurement of the Inclusive ep(+-) Scattering Cross Section at High Inelasticity y and of the Structure Function FL

**Author:** ROOSEN ROBERT

**Reference:** Eur.Phys.J.C71, pp.1579

Holographic Optics and Negative Refractive Index

**Authors:** AMARITI Antonio, Forcella Davide, MARIOTTI Alberto, Policastro Guisepp

**Reference:** JHEP 1104(2011)036,

HELAS and MadGraph with spin-3/2 particles

**Authors:** HAGIWARA K., MAWATARI Kentaro, TAKAUSU Y.

**Reference:** Eur.Phys.J. C71 (2011) 1529,

Search for Large Extra Dimensions in the Diphoton Final State at the Large Hadron Collider

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1105 (2011) 085,

Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at  $\sqrt{s}=7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1104 (2011) 050,

First Measurement of the Cross Section for Top-Quark Pair Production in Proton-Proton Collisions at  $\sqrt{s}=7$  TeV

**Authors:** ADLER Volker, BEAUCERON Stephanie, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Lett. B695 (2011), pp.424 - 443,

Prompt and non-prompt J/psi production in pp collisions at  $\sqrt{s}=7$ TeV

**Authors:** ADLER Volker, BEAUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Eur. Phys.j. C71(2011) 1575,

Charged particle multiplicities in pp interactions at  $\sqrt{s} = 0.9, 2.36,$  and 7 TeV

**Authors:** ADLER Volker, BEAUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1101 (2011) 079,

Measurement of the Isolated Prompt Photon Production Cross Section in pp Collisions at  $\sqrt{s}=7$  TeV

**Authors:** ADLER Volker, BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys. Rev. Lett. 106 (2011) 082001,

Measurement of Bose-Einstein Correlations in pp Collisions at  $\sqrt{s}=0.9$  and 7 TeV

**Authors:** ADLER Volker, BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1105 (2011) 029,

Search for Supersymmetry in pp Collisions at 7 TeV in Events with Jets and Missing Transverse Energy

**Authors:** BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Lett. B698 (2011) 196-218, pp.196 - 218,

Measurement of the B<sup>+</sup> Production Cross Section in pp Collisions at  $s=7\sim$ TeV

**Authors:** ADLER Volker, BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Rev.Lett. 106 (2011) 112001,

Search for a heavy gauge boson W' in the final state with an electron and large missing transverse energy in pp collisions at  $\sqrt{s} = 7$  TeV

**Authors:** ADLER Volker, BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Lett. B698 (2011), pp.21 - 39,

Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at  $\sqrt{s} = 7$  TeV

**Authors:** ADLER Volker, BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Rev.Lett. 106 (2011) 201802,

Search for Pair Production of Second-Generation Scalar Leptoquarks in pp Collisions at  $\sqrt{s} = 7$  TeV

**Authors:** ADLER Volker, BEAUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Rev.Lett. 106 (2011) 201803,

Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1106 (2011) 077,

Measurement of the differential dijet production cross section in proton-proton collisions at  $\sqrt{s}=7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Lett. B700 (2011), pp.187 - 206,

Limits on Neutrino Emission from Gamma-Ray Bursts with the 40 String IceCube Detector.

**Authors:** BOSE Debanjan, DE CLERCQ CATHERINE, DEPAEPE OLBREN, HUBERT Daan, LABARE Mathieu, RIZZO Alfio, STRAHLER Erik, VAN EIJNDHOVEN Nicolaas

**Reference:** Phys.Rev.Lett. 106 (2011) 141101,

Measurement of the atmospheric neutrino energy spectrum from 100 GeV to 400 TeV with IceCube.

**Authors:** BOSE Debanjan, DE CLERCQ CATHERINE, DEPAEPE OLBREN, HUBERT Daan, LABARE Mathieu, RIZZO Alfio, STRAHLER Erik, VAN EIJNDHOVEN Nicolaas

**Reference:** Phys.Rev. D83 (2011) 012001,

Measurement of Acoustic Attenuation in South Pole Ice

**Authors:** BOSE Debanjan, DE CLERCQ CATHERINE, DEPAEPE OLBREN, HUBERT Daan, LABARE Mathieu, RIZZO Alfio, STRAHLER Erik, VAN EIJNDHOVEN Nicolaas

**Reference:** Astropart.Phys. 34 (2011) 382-393,

Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at  $\sqrt{s} = 7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1106 (2011) 093,

Measurement of the  $t\bar{t}$  production cross section and the top quark mass in the dilepton channel in  $pp$  collisions at  $\sqrt{s}=7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1107 (2011) 049,

Search for Resonances in the Dilepton Mass Distribution in  $pp$  Collisions at  $\sqrt{s}=7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1105 (2011) 093,

Search for a  $W^?$  boson decaying to a muon and a neutrino in  $pp$  collisions at  $\sqrt{s}=7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Lett. B701 (2011) 160-179, pp.160 - 179,

Measurement of  $W^+W^-$  Production and Search for the Higgs Boson in  $pp$  Collisions at  $\sqrt{s}=7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Lett. B699 (2011) 25-47, pp.25 - 47,

Study of Z boson production in PbPb collisions at nucleon-nucleon centre of mass energy = 2.76 TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys. Rev. Lett. 106 (2011) 212301,

Search for a Heavy Bottom-like Quark in  $pp$  Collisions at  $\sqrt{s}=7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** pp.204 - 223,

Strange Particle Production in pp Collisions at  $\sqrt{s} = 0.9$  and 7 TeV

**Authors:** BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA, GONZALEZ SUAREZ Rebeca

**Reference:** JHEP 1105 (2011) 064,

Measurement of Dijet Angular Distributions and Search for Quark Compositeness in pp Collisions at  $\sqrt{s}=7$  TeV

**Authors:** BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Rev.Lett. 106 (2011) 201804,

First Measurement of Hadronic Event Shapes in pp Collisions at  $\sqrt{s}=7$  TeV

**Authors:** ADLER Volker, BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Lett. B699 (2011), pp.48 - 67,

Dijet Azimuthal Decorrelations in pp Collisions at  $s=7\sim$ TeV.

**Authors:** BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Rev.Lett. 106 (2011) 122003,

Inclusive b-hadron production cross section with muons in pp collisions at  $\sqrt{s} = 7$  TeV

**Authors:** ADLER Volker, BEUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1103 (2011) 090,

Holographic Thermalization

**Authors:** Balasubramanian Vijay, BERNAMONTI ALICE, DE BOER Jan, COPLAND Neil Barclay, CRAPS BEN, Keski-Vakkuri Esko, Muller Berndt, Schafer Andreas, Shigemori Masaki, STAESSENS Wieland

**Reference:** Phys. Rev. D., issue 2, vol.84,



Search for Physics Beyond the Standard Model in Opposite-Sign Dilepton Events at  $\sqrt{s}=7$  TeV.

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1106 (2011) 026,

Search for stopped Gluinos in pp collisions at  $\sqrt{s} = 7$  TeV

**Authors:** ADLER Volker, BEAUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys. Rev. Lett. 106 (2011) 011801,

Search for Heavy Stable Charged Particles in pp collisions at  $\sqrt{s}=7$  TeV.

**Authors:** ADLER Volker, BEAUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1103 (2011) 024,

Measurements of Inclusive W and Z Cross Sections in pp Collisions at  $\sqrt{s}=7$  TeV

**Authors:** ADLER Volker, BEAUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1101 (2011) 080,

Time-Integrated Searches for Point-like Sources of Neutrinos with the 40-String IceCube Detector.

**Authors:** BOSE Debanjan, DE CLERCQ CATHERINE, DEPAEPE OLBREN, HUBERT Daan, LABARE Mathieu, RIZZO Alfio, STRAHLER Erik, VAN EIJDHOVEN Nicolaas

**Reference:** Astrophys.J. 732 (2011) 18,

Measurement of B anti-B Angular Correlations based on Secondary Vertex Reconstruction at  $\sqrt{s}=7$  TeV

**Authors:** BEAUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** JHEP 1103 (2011) 136,

Measurement of the  $B_0$  production cross section in pp Collisions at  $\sqrt{s} = 7$  TeV

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit

**Reference:** Phys. Rev. Lett. 106, 252001 (2011),

Search for Supersymmetry in pp Collisions at  $\sqrt{s}=7$  TeV in Events with Two Photons and Missing Transverse Energy

**Authors:** BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, KALOGEROPOULOS Alexis, MAES JORIS, MAES Michael, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys. Rev. Lett. 106 (2011) 211802,

On non-abelian T-dual geometries with Ramond fluxes

**Authors:** THOMPSON Daniel, Sfetsos Konstadinos

**Reference:** Nuclear Physics B, vol.846, pp.21 - 42,

**URL:** <http://arxiv.org/pdf/1012.1320>

Constraints on the Extremely-high Energy Cosmic Neutrino Flux with the IceCube 2008-2009 Data

**Authors:** BOSE Debanjan, DE CLERCQ CATHERINE, DEPAEPE OLBREN, HUBERT Daan, LABARE Mathieu, RIZZO Alfio, STRAHLER Erik, VAN EIJDHOVEN Nicolaas

**Reference:** Phys.Rev. D83 (2011) 092003,

Search for Microscopic Black Hole Signatures at the Large Hadron Collider.

**Authors:** ADLER Volker, BEAUCERON Stephanie, BLEKMAN Freya, BLYWEERT Stijn, D'HONDT Jorgen, DEVROEDE Olivier, GONZALEZ SUAREZ Rebeca, MAES JORIS, MAES Michael, TAVERNIER STEFAAN, VAN DONINCK WALTER, VAN MULDER'S PETRA, VAN ONSEM Gerrit, VILLELLA ILARIA

**Reference:** Phys.Lett. B697 (2011), pp.434 - 453,

## 2011

### **I1: communications at international congresses / symposia integrally published in proceedings**

Mimicking the Cosmological Redshift with Time Dependent Transformation Optics

**Authors:** GINIS Vincent, TASSIN Philippe, CRAPS BEN, VERETENNICOFF IRINA

**Reference:** from 3rd International Topical Meeting on Nanophotonics and Metamaterials (NANOMETA), vol.2011, eds. Nicolay Zheludev, published by European Physical Society

**2010**

**C: articles in scientific journals with an international referee system**

Measurement of the Charm and Beauty Structure Functions using the H1 Vertex Detector at HERA.

**Authors:** AARON F.D., ROOSEN ROBERT, MARAGE P., FAVART L.

**Reference:** Eur.Phys.J.C65:89-109,2010, pp.89 - 109,

Extending the search for neutrino point sources with IceCube above the horizon.

**Authors:** ABBASI R., DE CLERCQ CATHERINE, VAN EIJNDHOVEN Nicolaas, DEPAEPE OLBREN, HUBERT Daan, RIZZO Alfio, BERTRAND DANIEL, BECHET S., LABARE M.

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Holographic models of cosmological singularities (invited talk)

**Author:** CRAPS BEN

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**Authors:** BRUYNDONCKX PETER, LEMAITRE CEDRIC, SCHAART D., MAAS M., VAN DER LAAN D.J., KRIEGUER MAGALIE, DEVROEDE Olivier, TAVERNIER STEFAAN

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**Authors:** VAN DER LAAN D.J., MAAS M., de Jong H.W.A.M., SCHAART D., BRUYNDONCKX PETER, LEMAITRE CEDRIC, VAN EIJK C.

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**Authors:** AMARAL P., BRUYNDONCKX PETER, CARRIÑO B., FERRE J., LUYTEN J., MOURA R., ORTIGAO C., RODRIGUES P.R., Da Silva Jose, TRINDADE A., VARELA Joao

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**Authors:** Jung Jin Ho, Choi Yong, Chung Yong Hyun, DEVROEDE Olivier, KRIEGUER MAGALIE, BRUYNDONCKX PETER, TAVERNIER STEFAAN

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**Authors:** ACHTERBERG A., DE CLERCQ CATHERINE, BARET BRUNY, HUBERT Daan, RIZZO Alfio

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**Authors:** ACHTERBERG A., DE CLERCQ CATHERINE, BARET BRUNY, HUBERT Daan, RIZZO Alfio, BERTRAND Daniel, BERGHAUS Patrick

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**Authors:** ACHTERBERG A., DE CLERCQ CATHERINE, BARET BRUNY, HUBERT Daan, RIZZO Alfio

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, D'HONDT Jorgen, LEMONNE JACQUES, BERTRAND Daniel, WICKENS John

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**Authors:** AKTAS A., ROOSEN ROBERT, JOHNSON DENIS, ASTVATSATOUROV Anatoli

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, LEMONNE JACQUES, D'HONDT Jorgen

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, LEMONNE JACQUES, D'HONDT Jorgen, BERTRAND Daniel, WICKENS John

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**Authors:** CMS Collaboration, VAN DONINCK WALTER, D'HONDT Jorgen, DE WEIRDST STIJN, GOORENS ROBERT, HEYNINCK Jan, LOWETTE STEVEN, TAVERNIER STEFAAN, VAN LANCKER LUC, BOUHALI O., CLERBAUX B, DE LENTDECKER Gilles  
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**Authors:** Bonora L., MACCAFERRI Carlo  
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**Authors:** Bouatta Nazim, MACCAFERRI Carlo  
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**Authors:** BRUYNDONCKX PETER, LEMAITRE CEDRIC, VAN DER LAAN D.J., MAAS M., SCHAART D., DEVROEDE Olivier, KRIEGUER MAGALIE, TAVERNIER STEFAAN

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**Authors:** MAAS M., VAN DER LAAN D.J., SCHAART D., BRUYNDONCKX PETER, LEMAITRE CEDRIC, VAN EIJK C.

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**Authors:** Rato Pedro, BRUYNDONCKX PETER, Navarrette J., PÉREZ Jos, LI ZHI

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**Author:** DE CLERCQ CATHERINE

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**Author:** ABOU ZEID MOHAB

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**Authors:** HUBERT Daan, Davour Anna

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**Author:** HUBERT Daan

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**Authors:** BRUYNDONCKX PETER, LI ZHI, LEMAITRE CEDRIC, PÉREZ Jose Manuel, SCHAART D., MAAS M., VAN DER LAAN D.J., TAVERNIER STEFAAN, WANG Yonggang

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**Authors:** VAN MULDER PETRA, D'HONDT Jorgen, VILLELLA ILARIA

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**Authors:** BRUYNDONCKX PETER, LI ZHI, LEMAITRE CEDRIC, PÉREZ José, RATO Pedro, SCHAART D., MAAS M., VAN DER LAAN D.J., TAVERNIER STEFAAN

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**Authors:** BRUYNDONCKX PETER, LEMAITRE CEDRIC, TAVERNIER STEFAAN

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**Author:** D'HONDT Jorgen

**Reference:** CMS note 2006/065

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**Author:** D'HONDT Jorgen

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**Author:** D'HONDT Jorgen

**Reference:** CMS note 2006/064

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**Authors:** LOWETTE STEVEN, D'HONDT Jorgen

**Reference:** CMS note 2006/109

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**Authors:** VAN MULDER PETRA, D'HONDT Jorgen, HEYNINCK Jan, LOWETTE STEVEN

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**Authors:** MOSSET J.B., DEVROEDE Olivier, KRIEGUER MAGALIE

**Reference:** Transactions on Nuclear Science, submitted for publication

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, D'HONDT Jorgen, LEMONNE JACQUES, BERTRAND Daniel, WICKENS John

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, D'HONDT Jorgen, LEMONNE JACQUES, BERTRAND Daniel, WICKENS John

**Reference:** Eur.Phys.J.C46 (2006) 559-568

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**Authors:** ACKERMANN M., DE CLERCQ CATHERINE, HUBERT Daan, OLBRECHTS Philip

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**Authors:** CRAPS BEN, RAJARAMAN Arvind, SETHI Savdeep

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, D'HONDT Jorgen, LEMONNE JACQUES

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, D'HONDT Jorgen, LEMONNE JACQUES, BERTRAND Daniel, WICKENS John

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, D'HONDT Jorgen, LEMONNE JACQUES, BERTRAND Daniel, WICKENS John

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**Authors:** ABDALLAH J., DE CLERCQ CATHERINE, D'HONDT Jorgen, LEMONNE JACQUES, BERTRAND Daniel, WICKENS John

**Reference:** Eur. Phys. J. C45 (2006) 273-289

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**Authors:** ACKERMANN M., DE CLERCQ CATHERINE, HUBERT Daan, OLBRECHTS Philip

**Reference:** Journal of Geophysical Research 111 (2006) D13203

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**Author:** CRAPS BEN

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**Authors:** Achterberg A., BARET BRUNY, DE CLERCQ CATHERINE, HUBERT Daan, OLBRECHTS Philip, RIZZO Alfio

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**Authors:** ACKERMANN M., DE CLERCQ CATHERINE, HUBERT Daan, OLBRECHTS Philip

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**Authors:** Achterberg A., BARET BRUNY, DE CLERCQ CATHERINE, HUBERT Daan, OLBRECHTS Philip, RIZZO Alfio

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**Authors:** MOSSET J.B., DEVROEDE Olivier, KRIEGUER MAGALIE, REY M., VIEIRA J.M., JUNG J.H., KUNTNER C., STREUN M., ZIEMONS Karl, AUFRAY Etienne, SEMPERE ROLDAN P., LECOQ P., BRUYNDONCKX PETER, LOUDE J.F., TAVERNIER STEFAAN, MOREL Christian

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**Authors:** BRUYNDONCKX PETER, LEMAITRE CEDRIC, LEONARD SOPHIE, SCHAART D., VAN DER LAAN D.J., MAAS M.S., DEVROEDE Olivier, WU Yibao, KRIEGUER MAGALIE, TAVERNIER STEFAAN

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**Authors:** VAN DER LAAN D.J., BRUYNDONCKX PETER, LEONARD SOPHIE, MAAS M.C., SCHAART D., VAN EIJK C.

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**Authors:** MAAS M.C., VAN DER LAAN D.J., SCHAART D., HUIZENGA J., BROUWER J.C., BRUYNDONCKX PETER, LEONARD SOPHIE, LEMAITRE CEDRIC, VAN EIJK C.

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**Authors:** ACHTERBERG A., BARET BRUNY, DE CLERCQ CATHERINE, HUBERT Daan, OLBRECHTS Philip, RIZZO Alfio

**Reference:** Physical Review Letters, vol.97, pp.22110

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**Authors:** CRAPS BEN, EVNIN Oleg, NAKAMURA Shin

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**Authors:** TAVERNIER STEFAAN, BRUYNDONCKX PETER, LEONARD SOPHIE, LEMAITRE CEDRIC, WU Yibao

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**Authors:** NEVENS Stijn, SEVRIN ALEXANDRE, WIJNS Alexander, Troost Walter

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**Authors:** MAES JORIS, SEVRIN ALEXANDRE

**Reference:** PHYSICS LETTERS B, issue 642, pp.535 - 539, published by Elsevier

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**Author:** ABOU ZEID MOHAB

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**Authors:** HENNEAUX M., LESTON MAURICIO, Persson Daniel, Spindel Philippe

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**Authors:** Aftab Z, VAN DONINCK WALTER

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**Authors:** Ball A, VAN DONINCK WALTER

**Reference:** Nucl.Phys.Proc.Suppl., vol.158, pp.99 - 102,

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**Authors:** Aftab Z, VAN DONINCK WALTER

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**Author:** LAMBERT FRANKLIN

**Reference:** Bilinear Integrable Systems: From Classical to Quantum, Continuous to Discrete  
Book Series: NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY  
Volume: 201 Pages: 147-159 P,

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Physics at the Large Hadron Collider

**Author:** D'HONDT Jorgen

**Reference:** Invited talk at the 'IX Workshop on High Energy Physics Phenomenology', Bhubaneswar, India

Top Quark Physics at the LHC

**Author:** D'HONDT Jorgen

**Reference:** Hadron Collider Symposium 2006

Cosmological Singularities (invited overview talk)

**Author:** CRAPS BEN

**Reference:** 38th International Symposium Ahrenschoop, Berlin, Germany, online proceedings,

**URL:** <http://qft.physik.hu-berlin.de/ahoop06/program.shtml>

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**Author:** HUBERT Daan

**Reference:** from Proceedings of the Workshop on Exotic Physics with Neutrino Telescopes (EPNT06), Uppsala, Sweden, 20-22 September 2006,

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**Authors:** VAN DER LAAN D.J., MAAS M., SCHAART D., BRUYNDONCKX PETER, LEMAITRE CEDRIC, VAN EIJK C.

**Reference:** Proceedings IEEE 2006, n. 124, pp.2506 - 2510,

First results with the ClearPET small animal PET scanners

**Authors:** AUFFRAY Etienne, BOUTEMEUR M., BRANDENBURG G., BRUYNDONCKX PETER, CHOI Y., DEVROEDE Olivier, DUJARDIN C., KRIEGUER MAGALIE, LEMAITRE CEDRIC, LEONARD SOPHIE, TAVERNIER STEFAAN, WISNIEWSKA Monika, WISNIEWSKI DARIUSZ, WU Yibao, FEDEROV Andrej, HEINRICHS U., JANIER M., JUNG J.H., KHODAVERDI M., KORJIK M., LARGERON G., LARTIZIEN Carole, LARUE H., LECOQ P., LOUDE J.F., MOREL Christian, MOSSET J.B., PARL Ch., PEDRINI Christian, PETROSYAN A.G., PEITRZYK U., REY M., SAPPEY-MARINIER Dominique, SEMPERE ROLDAN P., SIMON L., SONG Y., STAELENS S., STREUN M., TRUMMER J., VAN HOLEN R., VIEIRA J.M., WEBER S., WIEERS E., ZIEMONS Karl

**Reference:** Proceedings of the Nato Advanced research workshop Radiation Detectors for Medical Applications, pp.149 - 164, eds. S.Tavernier et al, published by Springer

A Matrix Big Bang (invited talk)

**Author:** CRAPS BEN

**Reference:** IHP workshop "High Energy, Cosmology and Strings", online proceedings,

**URL:** <http://www.luth.obspm.fr/IHP06/workshops/cosmo/>