# Joris Labie

http://linkedin.com/in/jorislabie joris.labie1@gmail.com | (+32) 478 42.55.64 Eikelbosstraat 8, 3940 Hechtel-Eksel



# **EDUCATION**

#### **KU LEUVEN**

MSc in Physics - Theoretical Physics

June 2016 | Leuven, Belgium

HASSELT UNIVERSITY
BSc in Physics, Cum Laude

Grad. Jun 2013 | Hasselt, Belgium WICO CAMPUS TIO

Grad. June 2009 | Overpelt, Belgium

# **LINKS**

Github://labiej LinkedIn://jorislabie

# **RELEVANT COURSEWORK**

#### **GRADUATE**

Molecular Dynamics simulations Monte Carlo simulations Intro to parallel computing (BSP model)

#### UNDERGRADUATE

Projects include:

Characterising Wind tunnel flow Detecting colours using solar cells

# **SKILLS**

#### **PROGRAMMING**

C • Matlab • LabVlew • Javascript • MySQL • Bash R • Node.js • Git

Various javascript frameworks including jQuery, React and knockout

# OTHER; PC-RELATED

GNUplot

MS Office and open-source alternatives Several Computer Algebra Systems ( Mathematica etc. )

Troubleshooting server issues

#### **LANGUAGES**

**Dutch** Native

**English** Fluent (oral + writing)

French Notions

# **EXPERIENCE**

#### **SCANA NOLIKO** FACTORY WORKER

Summer breaks in period 2012 - 2015 | Bree, Belgium

- Attention to strict health and safety codes
- On-the-spot troubleshooting prior to noticing technical support
- Gradually increasing responsibility, fully managing an entire production line in 2014 while working 12 hour weekend shifts

#### JAN DE RIJCK ADMINISTRATION IN TRANSPORT COMPANY

2011 - April 2012 | Beringen, Belgium

- Sorting of backlog freight manifests
- Planning routes for delivery and communication with both truckers, headman of the warehouse and potential third party transport companies
- Maintenance of trucks, filling coolant and washer fluid

# **HASSELT UNIVERSITY** JUNIOR LAB ASSISTANT

September 2011 | Hasselt, Belgium

- Undergraduate students are given the chance to work in the physics labs
- First an experiment was optimised both the hardware and software got improved (laser doppler anemometry)
- The second task was to prepare a new experiment for the following year, a lab text was written

# RESEARCH

# HUNTING FOR SIMPLE DE SITTER VACUA IN STRING THEORY

MASTERS THESIS

Oct. 2015 - Jun. 2016 | Leuven, Belgium

String theory is a candidate for a so-called theory of quantum gravity. The ultimate goal of such a theory is to unify the physics of particles at very small length scales with the physics governing our universe at the largest possible length scale. One of the big conundrums of string theory is whether it can describe a universe resembling ours. During the year long thesis project I looked for solution within the framework of string theory that looks like our universe. To do this we examined a small subset of models in the simplest settings that might allow such a solution. The result was negative, for these simple models which are quite restricted there aren't any solutions resembling our universe on cosmological scales.

# **OSMOSIS ON A LATTICE** MASTERS PROJECT

Feb 2014 - May 2014 | Leuven, Belgium

Together with Philip Ruijten I investigated osmosis in a non-equilibrium set-up. This was achieved by replacing the classical point particles by dimers and using specific rates in a lattice gas model. No new physics was found although it did seem to contradict with earlier work.

#### **INTERESTS**

Amateur football

Youth Movement in my hometown Reading books, mostly fantasy Various TV shows and movies

Discovering new music both online and at festivals