

# BAPTISTE AUGUIÉ

PhD in physics

French nationality • NZ residency

Born in 1982

LOCATION	Wellington, New Zealand
MOBILE	+64 (0) 224510532
EMAIL	baptiste.auguié@gmail.com
SKYPE	baptiste.auguié
WEBSITE	<a href="http://baptiste.github.io">http://baptiste.github.io</a>

## //////////////////// WORK EXPERIENCE

I have worked passionately in cutting-edge physics research for 10 years, in England, Spain, New Zealand, and Argentina. This multi-faceted experience has led to 28 peer-reviewed publications (*H*-index: 14) in several high-impact journals (Nature Photonics, Physical Review Letters, Angewandte Chemie), cumulating 1300 citations.

2015 – 2016	<b>Research and teaching Fellow</b>	VICTORIA UNIVERSITY OF WELLINGTON
	<ul style="list-style-type: none"><li>Lectured for the 3rd year physics curriculum (30 students, 1.5 trimesters)</li><li>Contributed to a challenging study of absorption in turbid media published in <i>Nature Photonics</i></li><li>Co-wrote open-source programs and user guides for electromagnetic simulations</li></ul>	
2013 – 2015	<b>Research Fellow</b>	CENTRO ATÓMICO BARILOCHE, ARGENTINA
	<ul style="list-style-type: none"><li>Proposed and demonstrated a novel optical sensor, after initiating a new collaboration</li></ul>	
2011 – 2013	<b>Post-doctoral Fellow</b>	VICTORIA UNIVERSITY OF WELLINGTON
	<ul style="list-style-type: none"><li>Developed a new technique enabling Raman spectroscopy of highly fluorescent dyes</li><li>Combined SPR and SERS spectroscopy with an original microscopy setup</li></ul>	
2010 – 2011	<b>Post-doctoral Fellow</b>	UNIVERSITY OF VIGO, SPAIN
	<ul style="list-style-type: none"><li>Conducted pioneering research in chiral plasmonics</li></ul>	
2009, 2010	<b>Invited visiting research Fellow</b>	CSIC, MADRID, SPAIN
	<ul style="list-style-type: none"><li>Elucidated incompatible results on supported arrays of metal nanoparticles</li></ul>	
2005 – 2009	<b>PhD in physics</b>	EXETER UNIVERSITY, UK
	<ul style="list-style-type: none"><li>Thesis: <i>Optical properties of gold nanostructures</i> (Advisor: Prof William L. Barnes)</li><li>First publication in the prestigious journal <i>Physical Review Letters</i></li></ul>	

## //////////////////// CORE COMPETENCIES

Physics	<b>Expert in nano-technology, optics and spectroscopy</b>
	<ul style="list-style-type: none"><li><i>Fabrication</i>: e-beam lithography • clean-room • sample preparation</li><li><i>Characterisation</i>: dark-field &amp; SPR microscopy • Raman, fluorescence &amp; CD spectroscopy</li><li><i>Theory</i>: light scattering, optics, electromagnetism, nano-technology</li></ul>
Programming	<b>Broad experience with data analysis, numerical modelling &amp; simulations</b>
	<ul style="list-style-type: none"><li>Data analysis and simulations using R, MATLAB, and C++</li><li>Active github profile since 2008. Over 70 git repositories, including &gt; 15 R packages</li><li>R user since 2007; contributions acknowledged in numerous books and over 30 publications (notably for: <code>grid</code>, <code>knitr</code>, <code>ggplot2</code>, <code>Rcpp</code>)</li><li>Expert advice and help via mailing lists, &gt; 1000 answers read by 1M users, 30k reputation on Stack Overflow: <a href="http://stackoverflow.com/users/471093/baptiste">stackoverflow.com/users/471093/baptiste</a></li></ul>

## ////////// ACQUIRED SKILLS

- Writing **Experienced science communicator**
- Wrote several grant applications, numerous cover letters and high-impact scientific articles
  - Strong advocate of dynamic report generation, using modern literate programming tools (markdown, pandoc,  $\LaTeX$  and R) for a more reproducible and efficient data analysis workflow
- Presentation **Advanced knowledge of R graphics, great attention to detail**
- My co-authors have trusted me with the figures for over 15 articles
  - Long-time user of Adobe Illustrator, Indesign, Photoshop
  - For specific visuals I also use 3D ray-tracing (scripted), and custom-made low-level R graphics
- Speaking **Good communicator**
- Fluent in French (native speaker), English (4 years in England, 3 in New Zealand), and Spanish (1 year in Spain, 2 in Argentina)
  - Over 20 talks at international conferences and meetings (audiences of 10–100 field experts)
  - Invited speaker at a 3-day workshop, and 4 other seminars (30–50 students and researchers)
- Leadership **Valued and adaptable team worker**
- Co-supervised 10 PhD students and visitors, and organised/co-supervised research visits for 4 PhD students (up to 3 months)
  - Lecturer for 3rd year physics (over 20 lectures, 35 students)
  - Obtained a £14,820 research fund to foster exchanges between our group, the UK, and Argentina
  - Organised a one-day national meeting on plasmonics in 2012, and chaired a session at the MacDiarmid flagship conference AMN7, host to 500 international participants
  - Referee for several high-impact journals

## ////////// EDUCATION

- 2004 – 2005 **Masters in physics** MONTRÉAL, CANADA | RENNES, FRANCE
- Exchange programme at the prestigious École Polytechnique, Montréal
  - Thesis: *Ultralow chromatic dispersion measurement of optical fibers with a tunable fiber laser*
- 2000 – 2005 **Engineering degree in physics** NATIONAL INSTITUTE OF APPLIED SCIENCES, RENNES, FRANCE
- Core topics: physics, technology, material science
- 2000 **Baccalauréat scientifique, with highest honors (*mention très bien*)** SEGRÉ, FRANCE

## ////////// PERSONAL INTERESTS



I am passionately curious about the world's diversity, and keen to connect with other cultures. I enjoy travelling, foreign literature (Murakami, Cortázar, Salter, Kundera) and cinema (Miyazaki, Iñárritu, Kusturica)



My professional interest in graphics and presentation is intertwined with personal hobbies including typography, calligraphy and photography; I coded and designed my personal website: [baptiste.github.io/photography](http://baptiste.github.io/photography)



During most holidays you will find me travelling, taking photos and exploring new areas. The rest of the year I enjoy regular running; in 2013 I completed Wellington's "Around the bays" half-marathon in under 2 hours