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# CURRICULUM VITÆ – MANUEL FERNANDO CORTEZ

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<b>Date of birth</b>	July, 1 <sup>st</sup> 1987, in Quito (Ecuador)
<b>Citizenship</b>	Ecuadorian
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## CURRENT POSITION

December 2011- present	PhD student in the Team PDEs and Analysis at the “Institut Camille Jordan” Supervisor : Lorenzo Brandolese (ICJ) Thesis Mathematical : <i>Finite time blowup of solutions of dispersive and semilinear parabolic equations</i> <i>solutions of semilinear parabolic equations</i>
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## EDUCATION

2010-2011	Máster en Investigación Matemática (M2) (Master’s Degree in Mathematics) University Complutense de Madrid Thesis : <i>PDEs in Moving Time Dependent Domains</i> Advisor : Aníbal Rodríguez-Bernal (DMA)
2005-2008	Licence Sciences, Technologies, Santé mention <i>Mathématiques</i> (Bachelor’s Degree in Mathematics) University Jean Monnet, Saint Etienne, France
2005	High school diploma in science Lyceo Martin Heidegger, Quito - Ecuador

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## FELLOWSHIPS, RESEARCH PROJECTS

December 2011-2015	<ul style="list-style-type: none"><li>• Ph.D. fellowship <i>Secretaría Nacional de Educación Superior, Ciencia, Tecnología e Innovación</i> (SENESCYT), Ecuador</li></ul>
2014-2017	<ul style="list-style-type: none"><li>• Non-permanent member of the project ANR Blanc DYFICOLTI : <i>Dynamique des fluides, Couches Limites, Tourbillons et Interfaces.</i> Worn by David Lannes(ENS Paris)</li></ul>

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## PUBLICATIONS

### PUBLISHED OR ACCEPTED

1. L. Brandolese, M. F. Cortez. *Blowup issues for a class of nonlinear dispersive wave equations*  
J. Diff. Equ. **256**, Issue 12, June 2014, p. 3981-3998.

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2. L. Brandoles, M. F. Cortez. *On permanent and breaking waves in hyperelastic rods and rings*  
J. Funct. Anal 266, Issue 12, June 2014, p. 6954-6987.
  3. M. F. Cortez , A.Rodríguez-Bernal. *PDEs in Moving Time Dependent Domains Without Bounds : A Scientific Canvas of Nonlinearity and Complex Dynamics.*  
Springer Berlin Heidelberg, 2013. p. 559-577.
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## PREPRINTS

1. M. F. Cortez. *Blow-up for the b-family of Equations*
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## PRESENTATIONS AND CONFERENCE

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### LECTURES PRESENTED

- **March 2015**, University Claude Bernard Lyon 1 (France), *Formation de singularités pour des équations d'ondes en eaux peu profondes*, Séminaire des Doctorants, ENSL, ICJ et UCB.
  - **February 2015**, University Complutense de Madrid(Spain), *Blowup issues for water wave propagation in shallow water*, Seminario de Doctorandos de Matemática.
  - **December 2014**, University d'Evry Val d'Essonne(France), *Blowup issues for water wave propagation in shallow water*, Séminaire de recherche dans l'équipe d'Analyse et Probabilités.
  - **August 2013**, University Central(Ecuador), *Finite time blowup of solutions of parabolic equations*, Seminario de investigacion Núcleo de Investigadores, Universidad Central del Ecuador.
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## ATTENDING

- **March 2015**, Nantes (France), *Young French Applied Mathematicians Meeting*.
  - **January 2015**, Rennes (France), *Free surface and geophysical flows*.
  - **October 2014**, Lyon (France), *Mathematics of Fluid Dynamics*.
  - **June 2014**, Strasbourg (France), *Participation in "SEME", an exchange week between University and Industry*.
  - **June 2014**, Roscoff (France), *Journée EDPs 2014*
  - **January 2014**, Paris (France), *Launch meeting of the project ANR Blanc DYFICOLTI*
  - **June 2013**, Biarritz (France), *Journée EDPs 2013*
  - **October 2012**, Porquerolles (France), *Math Flows 2012*
  - **April 2011**, Huesca (Spain), *Escuela Análisis Funcional y Aplicaciones*
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## RESEARCH ACTIVITIES AND VISITS

october 2012 - present	Member Amarun, Ecuadorian group of scientists
December 2013	University d'Evry Val d'Essonne(one week) invited by D. Chamorro (UEVE)

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## **TEACHING EXPERIENCES**

### **MASTER LEVEL**

- **2014** Institut National des Sciences Appliquées(INSA), Département Génie Electrique (Lyon-France).  
*Teacher Assistant* : Exercice lectures (TD) for the MA1 course (16h).  
*Principal Teacher* : Christian Reichert.

### **BACHELOR LEVEL**

- **2015** University Claude Bernard Lyon 1 , Département de Mathématiques (Lyon-France).  
*Teacher Assistant* : Exercice lectures (TD) for the Linear Algebra course (L1), (36h).  
*Principal Teacher* : Kenji Iohara.

### **HIGH SCHOOL LEVEL**

- **2009** *Mathematics Teacher*, High school León Cooper Quito(Ecuador)

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## **COMPUTER SKILLS**

- Knowledge of Ubuntu (Linux) operating system
- Knowledge of Windows et Apple operating systems and Microsoft Office tools
- Knowledge of Latex document markup language
- Basic knowledge of C/C++, Matlab, Maple programming languages
- Basic knowledge of HTML markup language

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## **LANGUAGES**

- Spanish (native speaker) ; English (proficient) ; French(proficient)