

RELUN Nicolas

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Nationality: French

Age: 28

PRESENT SITUATION

I currently have a post doctoral position at the IKM institute of the Gottfried Wilhelm Leibniz Universität Hannover. My research, done in collaboration with P. Wriggers, is about multi-scale approaches for crystal plasticity at finite strains related to metal forming (main themes: Finite Element Method, multi-scale approaches, crystal plasticity, finite strains, metal forming).

HIGHER EDUCATION

- **2008-2011 - LMT-cachan, Cachan, France**

PhD thesis on structural computation supervised by Prof. Boucard and Dr Néron. *Approche multiparamétrique pour la conception robuste en fatigue*. Defended the 12 of December, 2011

- **2003-2007 - Ecole Normale Supérieure de Cachan, Cachan, and Paris 6 University, Paris, France**

- 2006 - 2007 Second year of Master in Computational Mechanics
- 2005 - 2006 Preparing for *Agrégation* in Mechanical Engineering (Highest french teaching distinction) ranked 6th
- 2004 - 2005 First year of Master in Computational Mechanics
- 2003 - 2004 Bachelor of Science, with a major in Mechanical Engineering

WORK HISTORY - RESEARCH PLACEMENTS

- **2007-2008 - EDF R&D - Politecnico di Milano**

1 year VIE (*Volontariat International en Entreprise*) in the wind tunnel of Politecnico di Milano for EDF R&D, under the direction of Pierre Bousseau and Giorgio Diana. Subject: "Phenomenological model of Vortex Induced Vibration (VIV) on flexible wire"

Skills: VIV models, applied research and experimental point of view, Fortran 95 language

- **2006-2007 student year - LMT-Cachan**

4 month internship supervised by Prof. Boucard and Dr Néron. Subject: Geometric parametric analysis with the X-fem and the LATIN method.

Skills: parametric analysis, matlab language

- **Summer 2005 - Czech Technical University in Prague**

3 months Internship under the direction of Milan Jirasek. Subject: "Implementation of a cracking model in the finite elements code Oofem"

Skills: Finite element programming, eXtended Finite Element Method (XFEM), cracking models, C++ language

TEACHING ACTIVITIES

- **2009-2011 - IUT Cachan**

Whole class tutorials and practical work for First year of undergraduate in mechanical engineering. Basics of beam theory

COMMUNICATIONS

- **September 2011** - International Conference on Computational Plasticity Fundamentals and Applications (COMPLAS XI), Barcelona, Spain (accepted). *LATIN Analysis Dedicated to Parametric Studies of Elastoviscoplastic Metallic Components*
 - **May 2011** - Colloque National en Calcul des Structures (CSMA), Giens, France. *Stratégie dédiée à l'étude paramétrique de problèmes élasto-viscoplastiques d'évolution*
 - **July 2010** - World Congress of Computational Mechanics (WCCM), Sydney, Australia *Multiscale LATIN Analysis Dedicated To Parametric Studies Of Elastoviscoplastic Metallic Components*
 - **May 2010** - European Conference on Computational Mechanics (ECCM), Paris, France *Multiscale elastic-viscoplastic analysis using the Proper Generalized Decomposition*
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PAPERS

- **2011** - N.Relun, D. Néron, P.A. Boucard, *Multiscale elastic-viscoplastic computational analysis: a detailed example*. European Journal of Computational Mechanics. (accepted for publication)
 - **2012** - N.Relun, D. Néron, P.A. Boucard, *A model reduction technique based on the PGD for elastic-viscoplastic computational analysis*. Computational Mechanics. (submitted for publication)
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SKILLS

Foreign languages:

- English (TOEIC 815 Pts)
- Italian
- Basic knowledge of German

Software:

- Catia v5, Castem, Abaqus
- C++, Fortran 95, Matlab