Curicululll vitae

Josephin Giacomini

josephin.giacomini@gmail.com Josephin.giacomini@unicam.it

PERSONAL DETAILS

EDUCATION

Ph.D. in Applied Mathematics	University of Camerino	2013 - 2016
M.S. in Mathematics and Applications, cum laude	University of Camerino	October 2012
B.S. in Mathematics and Applications, cum laude	University of Camerino	October 2010

TEACHINGS

Computational Fluid Dynamics	Master's Degree Lectures, University of Camerino	2014 - 2015

- Course for students with different scientific backgrounds
' Introduced fundamentals of Fluid Dynamics
- Provided classical techniques to obtain numerical solutions

Mathematics	Bachelor's Degree Lectures, University of Camerino	2013 - 2014

' Introduced mathematical formalism and basics to first-year students

RESEARCH EXPERIENCES

Doctoral Project	University of Camerino	2013 - 2016

- Conducted detailed studies on analytical and numerical modelling of the flow problem and the heat transfer problem in turbulent state, applied to geothermal heat exchangers
- Developed ad-hoc numerical simulation tools
- Validated numerical results by a comparison with experimental and analytical results

Master's Degree Thesis University of Camerino 2012 • Conducted an opening research about the existence ofsingularities in a spherically symmetric spacetime

- Proposed an analytical method to search for naked singularities
- Created a starting point to confirm or deny the Penrose hypothesis

FAR Project MATREND	University of Camerino	2015 - now

- Arranged the task about the developing of a numerical model for heat exchange in geothermal probes

PUBLICATIONS

L P. Antonini, N. Egidi, J. Giacomini, P. Maponi, "Mathematical Models for Geothermal Heat Exchangers", MASCOT13 Proceedings, IMACS Series in Computational and Applied Mathonatics 19 (2016) 11-20.

2. N. Egidi, J. Giacomini, P. Maponi, "Solution Strategies for Finite Elements and Finite Volumes Methods applied to Flow and Heat Transfer Problem in U-shaped Geothermal Exchangers", AW conf Proc. 1738, 480045 (2016); doi: 10.1063/1.4952281

3. N. Egidi, J. Giacomini, P. Maponi, "A Mathematical Model for the Analysis of the Flow and Heat Transfer Problem in U-shaped Geothermal Exchangers". Submitted to Applied Mathematical Modelling. To be accepted.

CONFERENCE PRESENTATIONS

a. ICNAAM15 International Conference. Rodos Palace Hotel, Rhodes Island, Greece. September 23-29, 2015. Speaker and chair in General Session.

b. 19 [th] IMACS Word Congress. Real Centro Universitario El Escorial Maria Cristina, El Escorial, Spain. August 26-30, 2013. Speaker in the MASCOT 13 Section.

HONOURS AND AWARDS

Fellowship	University of Camerino	August - October 2016
Doctoral Fellowship	University of Camerino	2013 - 2016
Accepted the Class C Project IsC23 (PEGHE)	Super Computing department of CINECA	September 2014 - June 2015
Academic Scholarship	University of Camerino	2007 - 2012

EDUCATIONAL TRAVELS

University of Zagreb

Faculty of Mechanical Engineering and Naval Architecture   April - July 2015
CFD tearn of Prof. Hrvoje Jasak

- OpenFOAM software: from a beginning user to an expert user and a developer of a part of C++ code about matrix handling.

University of Genova   July 8-12, 2013
DICCA

- Introductory OpenFOAM course

ADDITIONAL INFORMATION

Languages   Italian (mother tongue)
                                             English (B2 - FCE certification) Last update:
                                             February 2017 acot)'bPi

Elenco dei documenti utili ai fini della valutazione allegati alla domanda di partecipazione alla procedura selettiva per l'attribuzione di n. 1 assegno di ricerca in SSD MAT/08 (candidato: Giacomini Josephin)

a) confirmation of stay at the University of Zagreb
b) certificate of attendance at 19th World Congress IMACS 2013
c) Ph.D. thesis (copia elettronica)
d) proceeding "Mathematical Models for Geothermal Heat Exchangers"
e) proceeding "Solution Strategies for Finite Elements and Finite Volumes Methods applied to Flow and Heat Transfer Problem in U-shaped Geothermal Exchangers"

f) FCE certificate