

Napolitano Tommaso

ISTRUZIONE

- 1994 Diploma di Maturità Classica con votazione 60/60 presso il Liceo Classico “M.T.Cicerone”, Frascati (Roma)
- 1995 Immatricolazione alla Facoltà di Ingegneria Meccanica della “Università degli Studi di Roma Tor Vergata”
- 2000 Stage di sei mesi presso la “Escuela Superior de Ingenieros Industriales” in San Sebastián, Spagna
- 2002 Conseguimento, in data 24 ottobre, della Laurea in Ingegneria Meccanica con voti 110/110 e lode, presso la “Università degli Studi di Roma Tor Vergata”
- 2003 Conseguimento dell'Abilitazione alla Professione di Ingegnere

ESPERIENZE LAVORATIVE

- 11-2002 07-2003 Impiegato presso l'ELETTROMEDIA S.r.l. in qualità di progettista meccanico di parti di altoparlanti ed amplificatori per car-audio

OCCUPAZIONE ATTUALE

- Da 07-2003 Impiegato presso l'ISTITUTO NAZIONALE DI FISICA NUCLEARE in Frascati (RM) in qualità di Tecnologo. Mansioni ricoperte: Progetto, controllo produzione ed installazione di parti meccaniche di esperimenti per la fisica nucleare

Principali attività svolte:

- Target-Wall (Esp. OPERA): Progettazione, messa a punto produzione, controllo qualità, installazione ed allineamento del target-wall
- Bric Assembly Machine (Esp. OPERA): Partecipazione alle fasi di sviluppo della meccanica e dell'automazione del processo produttivo. Responsabile della produzione di 150.000 rivelatori-brick
- Detector Bolometrico (Esp. CUORE): Progettazione, integrazione, controllo produzione, responsabile installazione ed allineamento del Detector Multy-Tower
- Criostato 10mK (Esp. CUORE): Integrazione e supporto alla progettazione dei 20 sottosistemi costituenti il criostato. Responsabile della gestione del modello CAD del criostato

Principali incarichi ricoperti:

- Responsabile del Servizio Progettazione e Costruzioni Meccaniche

CONOSCENZA SOFTWARE

Ottima conoscenza degli ambienti DOS e Windows e loro applicazioni come: Word, Excel, PowerPoint, AutoCAD, Pro Engineer, Catia v5 R19, Working Model 3D, Mathematica, Ansys, Nastran, Femap

Linguaggi di programmazione: C++, FORTRAN, Pascal

LINGUE STRANIERE

Ottima conoscenza delle lingue Inglese e Spagnolo sia scritte che parlate

Frascati, 26 aprile 2017

**EUROPEAN
CURRICULUM VITAE
FORMAT**



PERSONAL INFORMATION

Name
Telephone
E-mail
Nationality
Date of birth

ROSSI CECILIA

WORK EXPERIENCE

- Dates (from – to)
- Name and address of employer
 - Type of business or sector
 - Occupation or position held
- Main activities and responsibilities

JANUARY 2015 - TODAY

INFN – Sezione di Genova

Engineering

Mechanical design office (head of the mechanical design office from June 2015)

Thermofluidodynamic simulations, vibrational simulation and structural mechanical calculations for the INFN-Ge projects, management of the mechanical design office

- Dates (from – to)
- Name and address of employer
 - Type of business or sector
 - Occupation or position held
- Main activities and responsibilities

SEPTEMBER 2013 – DECEMBER 2014

CERN

Mechanical Engineering and Hydraulic Engineering

Post doc

Thermofluidodynamic simulation of the microchannels cooling system for the NA62 Giga Trackers and ALICE ITS with ANSYS CFX

Quality management technical documentation for the Atlas Thermosiphon project

- Dates (from – to)
- Name and address of employer
 - Type of business or sector
 - Occupation or position held
- Main activities and responsibilities

MARCH 2011 – MAY 2011 ; SEPTEMBER 2011 – DECEMBER 2011

CERN

Mechanical Engineering- Energy

Stage

Collaboration on the ATLAS cooling project for the PhD in Mechanical Engineering.

Support in the construction of the experimental set-up for the investigation of a new cooling system based on blending of refrigerants in phase transition. Data acquisition and analysis.

EDUCATION AND TRAINING

Dates (from – to)

Title of qualification awarded
Name and type of organisation
providing education and training
Main subjects
Title and thesis supervisor

2010 - 2013

PhD in Mechanical Engineering

University of Genoa

Mechanical Engineering - Energy

Title: "Optimization study of photovoltaic/thermal panels for the integrated production of electricity and heat through innovative cooling techniques"

Thesis supervisor: Prof Ing, L.A. Tagliafico (DIME, Genova)

The interest in solar energy grew considerably in the last decades. The main purpose of the researches is to improve the yield and the performance of the devices conceived to transform the solar energy into power to be used in everyday life. In this context the combination of a thermal panel and a photovoltaic

Brief description of the thesis

<p>Dates (from – to)</p> <p>Title of qualification awarded</p> <p>Name and type of organisation providing education and training</p> <p>Main subjects</p> <p>Title and thesis supervisors</p> <p>Brief description of the thesis</p>	<p>panel, called hybrid panels, appears to be a good compromise to produce both thermal and electrical power from a single device, therefore halving the required surface. This work investigates experimentally and numerically the potential of this technology. Different methodologies were investigated to achieve a better contact between the photovoltaic panel and the thermal plate. The analysis is developed both experimentally and numerically, testing different kinds of configurations in different operating conditions. Simulations are employed to analyse the effect of the variations of the contact resistance between the panel and the thermal plates, demonstrating that the use of a conductive paste increases the overall performance of the panel. Results show interesting possibilities in terms of retrofitting of existing photovoltaic panels by employing very simple solutions, such as to fix the thermal plate on the rear of the panel by means of wood ribs.</p> <p>2005 - 2008</p> <p>Master's Degree in Civil Engineering</p> <p>110/110 e lode e Dignità di stampa</p> <p>EPFL - Lausanne</p> <p>University of Genoa</p> <p>Hydraulic Engineering</p> <p>Title: "Hydrological control of cholera outbreaks"</p> <p>Thesis supervisors: Prof. Ing. A.Rinaldo (EPFL, Lausanne), Prof. Ing. P.Bartolini (DICAT, Genova)</p> <p>The thesis work was done at the EPFL in Lausanne.</p> <p><i>Description: Cholera is one of the main health emergencies in many lands. Several characteristics of this epidemic remain unexplained; even if experimental observations confirm a strong link between the cholera spread and the river systems. These serve in fact the function of 'ecological lanes' which transport and spread through the country the contagious bacillus responsible for the illness. The effort to summarize and foresee the development of the epidemics. gave birth to several mathematical models which, anyhow, disregarded the influence of some environmental constraints. The 2008 model of Bertuzzo et al. has, on the contrary, also taken into account the spatial distributions of the most relevant parameters. This thesis studies and analyses the model of Bertuzzo et al. to understand how the introduction of these additional constraints aspects the cholera spread. The model has been simulated applying a Matlab numerical code to a Peano network. The results obtained confirm the relevance of this new model and allow, in particular, to set down the parameters which play a major role in the diffusion of the epidemics</i></p>
<p>Dates</p> <p>Title of qualification awarded</p> <p>Name and type of organisation providing education and training</p> <p>Main subjects</p> <p>Title and thesis supervisor</p>	<p>2002 - 2005</p> <p>Bachelor of Civil Engineering</p> <p>107/110</p> <p>University of Genoa</p> <p>Civil Engineering</p> <p>Title: "Critical analysis of issues related to the application of acoustic classification in the City of Genoa"</p> <p>Thesis supervisors: Prof. Ing. L.A.Tagliafico (DITEC, Genova), Ing. P.Cavalletti (DITEC, Genova)</p>

SCIENTIFIC PAPERS

• Scientific papers

1. R.Bates et al.
A COMBINED ULTRASONIC FLOW METER AND BINARY VAPOUR MIXTURE ANALYZER FOR THE ATLAS SILICON TRACKER
arXiv:1210.4835, Journal of Instrumentation JINST8 (2013), P02006
doi:10.1088/1748-0221/8/02/P02006
2. S. Katunin et al.
DEVELOPMENT OF A CUSTOM ON-LINE ULTRASONIC VAPOUR ANALYZER/ FLOWMETER FOR THE ATLAS INNER DETECTOR, WITH APPLICATIONS TO GASEOUS TRACKING AND CHERENKOV DETECTORS
arXiv:1210.8045, Journal of Instrumentation, JINST8 (2013), C01002
doi:10.1088/1748-0221/8/01/C01002
3. C.Rossi, L.A. Tagliafico, F.Scarpa, V. Bianco (C. Rossi corresponding author)
EXPERIMENTAL AND NUMERICAL RESULTS FROM HYBRID RETROFITTED PHOTOVOLTAIC PANELS
Energy Conversion and Management, 76 (2013) 634–644;
dx.doi./10.1016/j.enconman.2013.07.088
4. G. Boyd et al.

IMPLEMENTATION OF ULTRASONIC SENSING FOR HIGH RESOLUTION MEASUREMENT OF BINARY GAS MIXTURE FRACTIONS

Sensors 2014, 14(6), pp. 11260-11276,
doi:10.3390/s140611260

5. C. Deterre et al.
A CUSTOM ON-LINE ULTRASONIC GAS MIXTURE ANALYZER WITH SIMULTANEOUS FLOWMETRY, DEVELOPED FOR THE UPGRADED EVAPORATIVE COOLING SYSTEM OF THE ATLAS SILICON TRACKER
IEEE Transactions on Nuclear Science, August 2014, 61(4), pp. 2059-2065
doi: 10.1109/TNS.2014.2326961
 6. M. Alhroob et al
DEVELOPMENT OF A CUSTOM ON-LINE ULTRASONIC VAPOUR ANALYZER AND FLOW METER FOR THE ATLAS INNER DETECTOR, WITH APPLICATION TO CHERENKOV AND GASEOUS CHARGED PARTICLE DETECTORS
Journal of Instrumentation JINST10 (2015), C03045
doi:10.1088/1748-0221/10/03/C03045
 7. R. Bates et al
THE COOLING CAPABILITIES OF C₂F₆/C₃F₈ SATURATED FLUOROCARBON BLENDS FOR THE ATLAS SILICON TRACKER
Journal of Instrumentation JINST 10 (2015), P03027
doi:10.1088/1748-0221/10/03/P03027
 8. M. Battistini et al (C. Rossi corresponding author)
THE THERMOSIPHON COOLING SYSTEM OF THE ATLAS EXPERIMENT AT THE CERN LARGE HADRON COLLIDER
International Journal of Chemical Reactor Engineering IJCRE (2015),
doi:10.1515/ijcre-2015-0022
 9. B. Pearson et al
IMPLEMENTATION OF AN ULTRASONIC INSTRUMENT FOR SIMULTANEOUS MIXTURE AND FLOW ANALYSIS OF BINARY GAS SYSTEMS
IEEE Transactions on Nuclear Science vol. PP, no.99, pp.1-1, (2016), doi:
[10.1109/TNS.2016.2561290](https://doi.org/10.1109/TNS.2016.2561290)
 10. A. O' Rourke et al
CUSTOM REALTIME ULTRASONIC INSTRUMENTATION FOR SIMULTANEOUS MIXTURE AND FLOW ANALYSIS OF BINARY GASES IN THE CERN ATLAS EXPERIMENT
Nuclear Inst. and Methods in Physics Research A (2016), doi:
10.1016/j.nima.2016.04.104
- Proceedings of conferences
1. L.A. Tagliafico, C.Rossi (presented by C. Rossi)
PANNELLI SOLARI FOTOVOLTAICI REFRIGERATI CON SISTEMI A POMPA DI CALORE
65° Congresso Nazionale ATI – Cagliari, 13-17 Settembre 2010;
ISBN 8890411635
 2. C. Rossi et al. (presented by C. Rossi)
A NEW ULTRASONIC INSTRUMENT FOR COMBINED REAL-TIME FLOWMETRY AND BINARY VAPOUR DETERMINATION IN A FLUOROCARBON EVAPORATIVE COOLING SYSTEM
13th International Conference Multiphase Flow in Industrial Plant, Genoa, 17-19 Sept. 2014
 3. C.Rossi, M. De Rosa, V. Bianco, F. Scarpa, L.A. Tagliafico.
PRELIMINARY EXPERIMENTAL RESULTS AND PERFORMANCE ANALYSIS OF HYBRID RETROFITTED PHOTOVOLTAIC PANELS
10th WSEAS International Conference on Applied and Theoretical Mechanics (MECHANICS '14) - Salerno, June 3-5, 2014, pp 152-161
ISBN: 978-960-474-377-3
- Conference talks
- National conference ATI (Cagliari, September 2010)
International conference Eurosun (Opatija – Croatia, September 2012)
13th International Conference on Multiphase Flow in Industrial Plant (Genoa, September 2014)
- Teaching experience
- Didactic seminars for Thermo Biomedical Engineering

• Training courses

Didactic seminars for Hospital Facilities Installation for Biomedical Engineering
 Didactic seminars for Engineering Thermodynamic for Civil Engineering
 Participation as expert in the examination committees for the course of Engineering Thermodynamic for Civil Engineering
 Co-supervisor of 7 thesis in mechanical engineering related to energy (students: D. Coco, M. Rondini, F. Stagliano, C. Turci, A. Rapetti, M. Di Caro, G. Romano)
 National school of Engineering Thermodynamics (Energy for sustainable development), 2010
 National school of Engineering Thermodynamics (Confined environment and air quality), 2011
 Training for the enrollment in the register of energy certifiers
 ANSYS CFD Introduction Training Course (10-13 June 2014)
 DT Training composite materials

PERSONAL SKILLS AND COMPETENCES
 MOTHER TONGUE (S)

ITALIAN
FRENCH

OTHER LANGUAGES

ENGLISH
SPANISH
GERMAN

<i>Reading skills</i>	<i>Writing skills</i>	<i>Verbal skills</i>
FLUENT (C1)*	FLUENT (C1)*	FLUENT (C1)*
BASIC (A2)*	BASIC (A2)*	BASIC (A2)*
BASIC (A1)*	BASIC (A1)*	BASIC (A1)*

* Common European framework of reference for languages

CERTIFICATES

FRENCH – DALF (DIPLOME APPROFONDI DE LANGUE FRANÇAISE)
 ENGLISH – FCA (FIRST CERTIFICATE IN ENGLISH)

SOCIAL SKILLS

Enjoy Working in a team, Good Communication Skills, Good negotiating skills and diplomacy,

ORGANISATIONAL SKILLS

Well-organized and efficient, Fast and good learner

TECHNICAL SKILLS

Operating Systems: Windows 7, Windows Xp, Linux
 Software: MS Office, MS Project, ANSYS CFX, Autocad, Comsol, Latex, Hec-Ras, Html, Maple
 Programming language: Matlab, Fortran, EES (Engineering Equation Solver)

ARTISTIC SKILLS

Graduated of Genoa's Conservatory in piano (July 2008)

ADDITIONAL INFORMATION

Admitted to the Italian Board of Professional Engineers (Albo degli Ingegneri) - n. 9715,
 Admitted to the Energy Certifiers Register (Certificatori Energetici) - n. 4596,

References provided upon request

ANNEXES

Curriculum Vitae

Cognome e Nome: De Paolis Alberto

Data e Luogo di Nascita:

Indirizzo :

Cittadinanza:

Codice Fiscale:

Formazione

Diploma di Qualifica di Congegnatore Meccanico conseguito in data 27/06/1978 presso l'Istituto Professionale per l'Industria e l'Artigianato di Guidonia (RM).

Esperienze Professionali

Dal 1/09/1978 al 15/04/1986 impiegato presso la Ditta Di Laurenzio di Roma, con la qualifica di Tornitore/Fresatore Specializzato, acquisisce esperienze nella costruzione di stampi e modelli per fusioni di alluminio ed ottone.

Dal 16/04/1986 dipendente dell'INFN presso i LNF con rapporto di lavoro a tempo indeterminato con qualifica di Operatore Tecnico Professionale nel Servizio di Meccanica della Div. Tecnica, acquisisce conoscenza sull'utilizzo di Fresatrici a Controllo Numerico e si specializza nella costruzione di apparati sperimentali complessi.

Nel Novembre 2008, a seguito di attività svolta in coincidenza con i contenuti professionali di livello superiore a quello assegnato, viene inquadrato nel profilo di VI° livello di Collaboratore Tecnico E.R..

Dal 1/01/2014 collabora con il responsabile dell'officina meccanica dei LNF affiancandolo e sostituendolo nelle attività di gestione del reparto.

Dal 1/02/2015 viene nominato Responsabile del Reparto Meccanica del Servizio Progettazione e Costruzioni Meccaniche della Divisione Tecnica. Coordina il personale del reparto gestendo la programmazione e l'assegnazione dei lavori da eseguire. Gestisce l'acquisto del materiale di consumo e delle attrezzature di officina. Cura e gestisce la manutenzione delle macchine utensili in dotazione al Reparto.

Frascati, 30/11/2017

In Fede