# Curriculum Vitae

Dario D'Orazio\*

January 24, 2019

## 1 Personal Data

Date of birth May, 1st, 1978

Place Pescara (PE), Italy

Nationality Italian

Civil Status Married

## 2 Education

- 2007 MSc degree in Electronic Engineering from University of Bologna. Dissertation in applied acoustics: "Mounting of a binaural measurement chain", supervisor: M. Garai.
- 2011 PhD degree in Nuclear, Energetic and Environmental Control Engineering from University of Bologna. Thesis: "The effective duration of the autocorrelation function of a sound signal: calculation methods, relationship with cognitive models and relevance on the subjective preference theory". Judge: Proff. R. Pompoli, E. Borgonuovo, M. A. Corticelli, tutor: M. Garai.
- **2011**—**today** Post doctoral research fellow at Department of Industrial Engineering of University of Bologna.

## 3 Certifications

- 2008 Professional Practice Exam (Engineer)
- 2009 Post graduate course "Acoustic Technician" (according to Italian Law 447/95).
- **2012** Enrolled to list of Acoustic Technicians (Prot. 119674 of 25/07/2012).

# 4 Activity in standardization bodies

2012—today Expert member of UNI (Italian National Standardisation Body) Committee on Acoustics and Vibration, CT002/SC01/GL07

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## 5 Awards

- 2013 Barducci prize for research project, granted by Italian Acoustics Association.
- 2012 Sacerdote prize of Best PhD Thesis in Acoustics, granted by Italian Acoustics Association.
- 2009 Best paper of 4th International Symposium on Temporal Design.

## 6 Project researches

Involved of the follow research projects:

- "Improvement of sound quality inside of Academic rooms" Total budget of about 120 000 euro
- "Evaluation of the survey activities of health care operators of Emilia-Romagna, Liguria e Toscana regions on noise and vibrations risks in most critical industrial sectors". Supported by INAIL. Budget 250 000 euros.
- "Acoustics and architecture of historical theatres of Emilia-Romagna". CIRI, Inter-University Centre for Industrial Research.
- "Noise control of the oil refining industrial plant in Busalla (GE)". Budget 70 000 euros.
- "Environmental and architectural acoustics in the municipal jurisdiction of Budrio (BO)". Budget of about 10 000 euro.
- "Evaluation of flanking transmission of innovative junctions for wooden structures". Supported by Rothoblas SpA (BZ). Budget 60 000 euro.

### As acoustic consultant:

- Acoustic design for "Torri dell'acqua" auditorium of Budrio (total cost of about 1M euro), 2009
- Acoustic design for the listening room at Acoustic Laboratory of University of Bologna, 2013
- Acoustic design for orchestra shell for Teatro Duse of Bologna, 2014
- Acoustic consultant for "Teatro Galli" of Rimini currently the biggest project for an opera house in Italy (total cost of about 16M euro), 2015–2018.
- Acoustic design for historical rebuilding of the former "Cinema Fulgor" inside of the new Fellini museum in Rimini, 2016.
- Acoustic design of audio restoring control room at Studio Son, Locarno (CH), 2017.

Responsible for the University of Bologna team in the 1st Round Robin on Auralisation held by SEACEN consortium (Brinkmann, Ackermann, Weinzierl, Aspöck, Obdam, Vorländer), 2016–2017.

Responsible for the University of Bologna team in the 1st Italian Round Robin on reverberant rooms (ISO 354 draft), 2017–2018.

## 7 Other scientific activities

## 7.1 Activities as journal editor

- Guest editor of Italian Journal of Acoustics (RIA), vol.
- Guest editor of Journal of Temporal Design, vol. 14

### 7.2 Activities as organizer and chair

- Organizer of the session "Recent trends in numerical modeling in performance spaces: protocols and reliability" at Euronoise 2018, May 2018, Crete.
- Co-chair of the 8th International Symposium on Temporal Design ISTD, Bologna, September 2017.
- Member of organizing committee of 37th National Congress of Italian Association of Acoustics (AIA), Rimini, May 2011. Member of the scientific committee of 20 Congreso Internacional de Acoustica UNTREF, September 2010.

### 7.3 Invited lectures

Invited lecturer at:

- 29.6.2017 "A loudspeaker orchestra for opera houses studies", Acoustics '17, Boston.
- 14.9.2016 "Recordings of anechoic opera orchestra, soloists and choir", Jornadas do sonido, Universitad National de Tres de Fevreiro, Buenos Aires.
- 15.6.2014 "Objective musician's criteria in Italian historical Theatres", al 22th International Congress of Sound and Vibrations, Florence.
- 13.12.2012 "The Acoustics of Emilia Romagna historic theatres" and "The use of Matlab in acoustics" at 5th International Seminar Multimedia technologies NAAS, Nova Gorica.
- 18.8.2012 "Measuring reverberation time using preprocessed energy detection", Internoise 2012, New York City.
- 15.07.2012 "The effective duration of the autocorrelation function of a sound signal" at 39th National Congress of Italian Association of Acoustics (AIA), Rome.

# 8 Teaching Activities

#### 8.1 Courses and other academic activities

2016–2017 Adjunct professor of Light Design and Acoustics, University of Bologna.

2007—today Tutoring activities for the courses on Physics applied to environment and buildings of the following Master degrees: Building Engineering and Architecture (Prof. M. Garai), Environmental Engineering (prof. P. Guidorzi), Energy Engineering (Prof. E. Zanchini), Building Engineering (Prof. L. Barbaresi). Tutoring activities for the course on Applied Acoustics and Lighting, Master in Building Engineering and Architecture (prof. M. Garai).

### 8.2 Thesis advisor

If not otherwise specified, all Theses have been discussed at University of Bologna.

#### PhD

- 1. Simona De Cesaris, A new method for the estimation of the reverberation time from measured room impulse responses with application to Italian opera houses, 2014.
- Federica Morandi, Theoretical and experimental investigation into stop-band properties of sonic crystals, 2016.
- 3. Giulia Fratoni, Room acoustic simulations: standardization of procedures and calculation models (expected in 2020).

#### MSc

- 4. Silvia Calamante, Progettazione acustica per il recupero polifunzionale di un ambiente a pianta ottagonale, 2007 (in Italian).
- 5. Michela Guizzardi, La dimensione acustica nella riqualificazione della Rocca Brancaleone di Ravenna, 2008 (in Italian).
- 6. Simona De Cesaris, Algoritmi innovativi per l'analisi psicoacustica, 2008 (in Italian).
- 7. Laura Melis, Una proposta di riqualificazione acustica per il PalaSavena (Post-graduation Master), 2010 (in Italian).
- 8. Laura Reggiani, Il Teatro Alighieri di Ravenna: rilevazioni acustiche e modelli numerici per la conservazione, la ricerca musicologica e l'auralizzazione di futuri allestimenti, 2010 (in Italian).
- 9. Maria Davoli, Il Teatro Goldoni di Bagnacavallo: rilevazioni acustiche, verifica di linearitá e accuratezza dei descrittori e simulazione numerica, 2011 (in Italian).
- 10. Federica Morandi, Acoustical characterization of sound radiation from stages: a comparison between the theatres of Cesenatico and Longiano, 2011.
- 11. Davide Spada, Acoustic characterization and numerical simulations of Rossini Theatre in Lugo and Masini Theatre in Faenza, 2012.
- 12. Valentina Sartini, Comparative analysis of five small sized italian theatres of the 19th Century, 2012.
- 13. Lisa Loreti, Assessing the effectiveness of ISO 3382 for evaluating the acoustical quality of italian historical theatres: the case study of the Bonci Theatre, 2013.
- 14. Andrea Muciaccia, Performing Sound Factory, University of Rome "La Sapienza", 2013.
- 15. Stefania Bruni, Architettura e acustica delle sale cinematografiche degli anni '50 e '60: i cinema Jolly e Principe di Vinicio Vecchi, 2013 (in Italian).
- 16. Alessandra Poli, Evaluating the acoustic quality of historical theatre stages for rock and pop performances, 2013.
- 17. Marta Barbiani, Valutazione dellincidenza della misura del tempo di riverberazione nella determinazione del potere fonoisolante in laboratorio, 2013 (in Italian).
- 18. Francesco Ciani, Design and acoustic characterization of a new listening room, 2013.
- 19. Lidia Guerra, Singer-oriented acoustic objective measurements in historical Italian theatres, 2014.
- 20. Alessandra Tovo, The acoustics of the orchestra pit in historical Opera houses, 2014.
- 21. Claudia Genestreti, Incidenza del tempo di riverberazione sullisolamento acustico di strutture verticali ed orizzontali, 2014 (in Italian).
- 22. Carlotta Mirri, Duse Theatre in Bologna: design of an orchestra shell, 2014.
- 23. Marco Bartolini, Caratterizzazione di una camera riverberante e calcolo del coefficiente di assorbimento acustico di materiali fonoassorbenti, 2015 (in Italian).
- 24. Giulia Bruschi, Ipotesi e metodologie di intervento per il miglioramento dellacustica delle aule scolastiche esistenti, 2015 (in Italian).
- 25. Valentina Silingardi, Comparative analysis of techniques for the acoustic characterization of large environments for listening to music and speech: the case of the Civic Theatre of Schio, University of Padua, 2015.

- 26. Fabio Sgarzi, Determinazione della trasmissione laterale di giunti strutturali innovativi per strutture in cross-lam, 2015 (in Italian).
- 27. Marco Rinaldi, Vibro-acoustic measurements of wooden stages in historical Italian theatres, 2015.
- 28. Alice Gaddi, La conservazione della memoria: analisi e studio dei cinema di paese. Progetto di recupero a San Giacomo delle Segnate, 2016 (in Italian).
- 29. Giulia Fratoni, Acoustic and lighting design of a multi-purpose hall inside a former church using innovative analysis methods, 2016.
- 30. Anna Rovigatti, Design of acoustic solutions for small rooms: the new control room at l'Immagine Ritrovata, 2016.
- 31. Alessia Frescura, Acoustics in eating establishments: a case study, 2016.
- 32. Federico Santangelo, Investigation of the acoustics and historical aspects of the Podestá Hall in Bologna, 2017.
- 33. Elena Rossi, The evolution of workplaces: Smart working. As architecture and acoustics redefine Magneti Marelli's offices, 2017.
- 34. Domenico De Salvio, Three case studies of enhancing speech intelligibility in University Lecture Halls, 2018.
- 35. Giulia Fanin, Comporre il vuoto: architetture e spazi pubblici per il centro storico di San Giovanni in Persiceto (in Italian), 2018.

#### BCe

- 36. Valentina Silingardi, Musicians subjective perception and objective acoustic descriptors in the stages of historical theaters of Romagna, 2012.
- 37. Davide Marchi, Application and enhancements of the Decca Tree microphone technique, 2014.

## 9 References

**ORCID** orcid.org/0000-0003-1924-9490

ResearcherID ID: Q-3277-2017

**Scopus** Author ID: 54781317800

Scholar https://scholar.google.it/citations?user=JJgo7uAAAAAJhl=it

Website https://www.unibo.it/sitoweb/dario.dorazio/en

# 10 Languages

Italian mother tongue

English good

French school proficiency

Bologna, January 24, 2019