

INTERNATIONAL WORKSHOP CLASSROOM NOISE: A RESEARCH UPDATE

Padova, 12 September 2025

Archivio Antico Palazzo Bo
Via 8 Febbraio, 2 - 35122 Padova

CONTENT AND OBJECTIVES

The workshop aims to foster an interdisciplinary dialogue between researchers engaged in studying the complex relationship between noise in school environments and its impact on both students and teachers.

By bringing together diverse perspectives and areas of expertise, the event seeks to promote a deeper understanding of how acoustic conditions influence teaching, learning, and overall classroom well-being. The program will feature contributions from leading national and international experts who will present research findings and practical insights on a range of topics. These include the cognitive effects of noise on learning, environmental comfort in classrooms, teacher well-being and the experiences of students with special educational needs.

A key component of the workshop will be a roundtable discussion, where tools and methodologies for assessing children's academic performance and behavioral responses under varying noise conditions will be explored. This session aims to bridge research and practice by identifying actionable strategies for creating more inclusive and acoustically supportive learning environments.

This workshop is part of a broader, multidisciplinary initiative focused on enhancing the quality of educational settings.

It draws on expertise from the fields of acoustics, psychology, neuroscience, and indoor environmental quality, and encourages collaboration across disciplines to address the growing need for evidence-based solutions that support the well-being and development of all learners.

INFORMATION

The workshop is promoted by the research groups collaborating on the following National Research Projects (PRIN):

– LEARN (CUP C53D23004070006) University of Padua, University of Ferrara

– EQUALITY (CUP F53D23001890006) Iuav University of Venice, University of Padua

Both projects are funded by the European Union – Next Generation EU, Mission 4-C2 Investment 1.1.

ORGANIZING COMMITTEE

Barbara Arfè, Antonino Di Bella, Irene Pavanello, Pietro Scimemi, Gaia Spicciarelli, *University of Padua*

Francesca Cappelletti, Ilaria Pittana, Cora Pavarin, Piercarlo Romagnoni, *Iuav University of Venice*

Nicola Prodi, Chiara Visentin, *University of Ferrara*

SCIENTIFIC COMMITTEE

Barbara Arfè, Antonino Di Bella, Pietro Scimemi, Rosamaria Santarelli, *University of Padua*

Francesca Cappelletti, Piercarlo Romagnoni, *Iuav University of Venice*

Nicola Prodi, Chiara Visentin, *University of Ferrara*

**PARTICIPATION IN THE WORKSHOP IS FREE, BUT
REGISTRATION IS MANDATORY TO RESERVE A SEAT.**

Deadline for online registration: 08 September 2025
Registration on site will be available depending on seat availability.

WORKSHOP SECRETARIAT

Simona Senesi Tel. +39 0532 735618 – 345 7082038
segreteria@acustica-ai.it

PROGRAM

8:30 – 9:15 **Participant Registration**

9:15 – 9:30 **Welcome and Introduction**

MORNING SESSION

9:30 – 10:10 **Implementing evidence-based practice - The challenges of classroom acoustics**
J. Dockrell (*University College London, UK*)

10:10 – 10:30 **LearN: Learning in noise. The cognitive effects of classroom noise**
B. Arfè¹, G. Spicciarelli¹, C. Visentin²,
F. Gheller¹, R. Santarelli¹, O. Pacagnella¹,
and N. Prodi² (¹*University of Padova, Italy*;
²*University of Ferrara, Italy*)

10:30 – 11:30 **Coffee break**

11:30 – 12:10 **What I Sense, How I Feel: The Classroom Sensory Environment from the Perspective of Children with Sensory Needs**
J. Massonnié, J. Stringer and D. Mavridou
(*University of Portsmouth, UK*)

12:10 – 12:30 **Classroom noise and cognitive performance in bilinguals**
P. Scimemi¹, I. Pavanello¹, I. Pittana², C.
Pavarin², P. Romagnoni², A. Di Bella¹, and
F. Cappelletti² (¹*University of Padova, Italy*;
²*IUAV University of Venice, Italy*)

12:30 – 12:50 **Within and cross-domain effects of environmental parameters on pupils' sensation and performance**
F. Cappelletti¹, P. Romagnoni¹, P. Scimemi²,
A. Di Bella², I. Pittana¹, C. Pavarin¹, and
I. Pavanello² (¹*IUAV University of Venice,
Italy*; ²*University of Padova, Italy*)

12:50 – 14:00 **Pranzo**

AFTERNOON SESSION

14:00 – 14:40 **Bringing the real world into the lab: Hearing research in interactive virtual environments**
J. Fels (*RWTH Aachen, Germany*)

14:40 – 15:00 **Monitoring speech and noise levels in active classrooms**
N. Prodi and C. Visentin (*University of
Ferrara, Italy*)

15:00 – 15:20 **Methods for comparing performance under reference laboratory conditions**
A. Di Bella¹, M. Marigo¹, C. Pavarin²,
P. Scimemi¹, I. Pavanello¹, I. Pittana²,
P. Romagnoni², and F. Cappelletti²
(¹*University of Padova, Italy*; ²*IUAV University
of Venice, Italy*)

15:20 – 16:00 **Comparison of open, flexible, and enclosed learning spaces – teaching staff's experiences and activity sound exposure**
J. Radun (*Turku University of Applied
Science, Finland; Metropolia University of
Applied Sciences, Finland*)

16:00 – 16:20 **Quiet school? How teachers perceive the acoustic quality of their school classrooms**
O. Incognito¹, A. Corbani², L. Bigozzi²,
G. Vettori², and A. Mercugliano² (¹*Online
University IUL, Italy*; ²*University of Firenze, Italy*)

16:20 – 17:45 **Round Table**
Measuring children performance in
noise: tools and methods

17:45 – 18:00 **Conclusions**