



Prot.n. 4712

Matera, 16/08/2024

CONSERVATORIO E. R. DUNI DI MATERA

Call for applications to PhD courses
40th cycle – a.y. 2024/2025

BEYOND THE SOUNDSCAPE: MUSICOLOGICAL PERSPECTIVES IN THE SOUND MAPPING OF ECOSYSTEMS AND IN THE SOUND INTERPRETATION OF THE TERRITORY

THE DIRECTOR OF THE CONSERVATORY OF MATERA

- In accordance with Law no. 210/1998, and in particular art. 4, as amended in art. 19, paragraph 1, of Law no. 240/2010, containing “Rules on the organisation of universities, academic staff and recruitment, as well as delegation to the Government to encourage the quality and efficiency of the university system”;
- In accordance with Law no. 508/1999, concerning the “Reform of the Academies of Fine Arts, the National Academy of Dance, the National Academy of Dramatic Art, the Higher Institutes for the Artistic Industries, the Music Conservatories and the Accredited Music Institutes”;
- In accordance with the Decree of the President of the Republic no. 132/2003 containing “Regulation containing criteria for the statutory, regulatory and organisational autonomy of artistic and musical institutions, in accordance with Law no. 508 of 21 December 1999”;
- In accordance with the Decree of the Minister of University and Research no. 226/2021, “Regulation on the accreditation of doctoral sites and courses and criteria for the establishment of doctoral courses by accredited bodies”, Article 15 of which states that “within twelve months from the date of entry into force of this regulation, the procedures for the accreditation of PhD courses of higher education institutions shall be defined by decree of the Minister artistic, musical and dance law, in compliance with the provisions of Article 2, paragraph 5, of Law No. 508 of 21 December 1999”;
- In accordance with the Decree of the Minister of University and Research no. 470/2024, which regulates the PhD in Higher Education in Art, Music and Dance and provides the necessary skills to carry out at the aforementioned AFAM Institutions, Universities, Public Bodies or private entities, highly qualified research activities, also for the purpose of access to careers in public administrations and the integration of high-quality professional paths innovativeness;
- In accordance with Ministerial Decree no. 544/2024, containing the “Decree for the determination of the annual amount of the scholarship for attendance at PhD courses in the Institutions of Higher Education in Art, Music and Dance”, which establishes that starting from the academic year 2024-2025 the annual amount of the scholarship for attendance at PhD courses in the Institutions of Higher Education in Arts, Music and Dance is equal to € 16,243.00, gross of social security charges payable by the recipient;
- In accordance with the Ministerial Decrees no. 629/2024 and no. 630/2024, which allocates “resources aimed at supporting doctoral courses in three-year PNRR PhD courses” for which the parties have been awarded scholarships;



- In accordance with the Ministerial Decree no. 778/2024 containing the "Guidelines for the accreditation of research doctorates of the Institutions of Higher Artistic, Musical and Dance Education (AFAM)";
- In accordance with the Note of the General Secretariat, Directorate General for Higher Education and Right to Education of 18 June 2024 concerning the "Operating Instructions for AFAM Institutions in addition to the note prot. 8614 of 2 May 2024" ("further operating instructions relating to the accreditation procedure for doctoral courses");
- In accordance with the Statute and the Teaching Regulations of the E. R. DUNI Conservatory of Matera;

DECREES

Art. 1 – Establishment of the PhD Course entitled:

BEYOND THE SOUNDSCAPE: MUSICOLOGICAL PERSPECTIVES IN THE SOUND MAPPING OF ECOSYSTEMS AND IN THE SOUND INTERPRETATION OF THE TERRITORY

The PhD course has its administrative headquarters in the Conservatory of Matera and has a three-year duration starting on 1 December 2024 and ending on 30 November 2027.

Art. 2 – Announcement of selection procedures.

A public competition, based on qualifications and exams, is announced at the Conservatory of Music of Matera for admission to the XL Cycle PhD Course, referred to in art. 1 of this Call for Applications, with administrative headquarters in the E. R. Duni Conservatory of Music in Matera for a total number of 2 (two) scholarships, co-financed through PNRR funds, are available under the "From Research to Business" initiative, aimed at promoting innovative doctoral programmes that meet the needs of businesses and facilitate the employment of researchers. Each scholarship amounts to €16,243.00 annually, before applicable deductions. This announcement is drawn up in Italian and English in accordance with the provisions of the regulations in force on the subject. It has the value of notification to all intents and purposes. The Conservatory assumes no responsibility for the dispersion of communications due to inaccurate indications of personal contact details by the candidate or failure or late communication of their change, or electronic misunderstandings.

Art. 3 – Description and purposes of the PhD Course.

This PhD results from the long experience gained through developing specific analytical methodologies and using computational sonology technologies in sound topology. In particular, the project of this Doctorate combines musicological skills, which pertain to the historical-philosophical and compositional disciplines, and computer skills, with specific reference to the tools that today the researcher and the artist find in Artificial Intelligence.

The methodology we intend to develop is based on the cooperative articulation between artistic and scientific skills, in the belief that the relationship between arts and sciences, also in terms of moral implications, today



more than ever is the foundation of a new paradigm and a different interpretation of the relationship between theory and practice. The project will combine the partnerships the Matera Conservatory has already activated, providing research with the indispensable elements for achieving the final objectives.

Finally, our project is linked to goals 4, 9, 11, 13 and 15 of the 2030 Agenda proposed by the UN (<https://unric.org/it/agenda-2030/>), convinced as we are that artists must make a fundamental contribution to strengthening an ecological conscience.

For these reasons, we have decided to turn our attention to the soundscape, limiting ourselves here to recalling the centrality of the concept of space in the history of music. A concept that refers to the very foundations of the art of sounds, firmly anchored, as is well known, to geography and geometry. Our PhD intends to develop a methodology for sound mapping of ecosystems that can be extended to any other case, starting from the local case study. From here, to develop a computer model for assisted music composition, which offers new possibilities to the artist. In this sense, we understand the concept of landscape art in an extended version, in which the sound elements are not simply accessories but constitute an integral part of the design and outcome of the work.

In the history of music, landscapes have represented an aesthetic model before becoming a real object of research. Initially, the study focused on sound sampling of naturalistic and urban spaces. Our sound topology methods allowed us to go further. We can develop sound maps that describe the places considered in musical terms. In our PhD project, we propose considering Murgia Materana Park as a specific case study.

These are the steps:

1. Data collection, sound, biological, and geographical-topological data.
2. The constitution of a specific LLM is interpreted through a specially trained neural network.
3. Computation of data for processing a sound generation application on an interpretative basis.
4. Immersive audio-visual representation (3D and/or virtual models) of the environments thus obtained.

This typology of musical mapping is carried out through close interdisciplinary collaboration with scientific institutions and experts in the area. It is the experts who provide detailed and representative data of the ecosystem of the area under consideration. The sound generation system uses this data to create sound structures through a specific interpolation and use in a programming environment of computer music applications.

Art. 4 - Goals of the Doctorate.

Our PhD aims to develop an articulated set of objectives that combine musicological, compositional and technological skills to explore new horizons in sound composition and representation by mapping and interpreting the different possible soundscapes. Precisely for this reason, the project is committed to adhering to the goals of the UN 2030 Agenda, with particular attention to environmental sustainability. The project's first objective is the development of advanced analytical methodologies for sound topology. Through an interdisciplinary approach that combines musicological, compositional, computer science and technological skills, we intend to develop techniques to analyse and map different ecosystems in detail. Therefore, a fundamental aspect of the project is the collection of sound, biological and geographical-topological data. By combining these data, we can create sound maps capable of representing a territory from an environmental and topological point of view, starting from the Murgia Materana Park case study.



The model thus obtained can be extended to any other possible ecosystem and, with the appropriate adjustments, to any type of mapping, including urban ones. To achieve this goal, it will be necessary to set up specific databases on which to operate through deep learning and AI architectures and with the tools of computational sonology and then apply the different possible compositional techniques. The aim is not only to create musical works but also to offer users a new perspective, on a sound basis, to get to know and better appreciate the environments in which they live or frequent. From this point of view, we intend to extend the concept of landscape art, integrating sound elements as a fundamental part of artistic design. The goal is to develop works in which sound is not a simple accessory but a central element that contributes to the narrative and the overall aesthetics of the work.

In addition, the project also aims to create immersive representations of the mapped environments using 3D, virtual reality and augmented reality technologies. These representations will offer complete sensory experiences, allowing creative interaction within immersive environments. Each model will be linked to a specific sound dimension based on collected and processed samples. The sounds of the various species can, within the application, be manipulated to create an interactive and creative experience that can lead to the generation of original compositions. Therefore, one of the objectives of the Doctorate is to offer a multidisciplinary compositional and musicological training that uses different contributions, articulating scientific research and artistic research in a single path. The programme will promote an integrated and innovative approach, training PhD students in this emerging field full of professional possibilities.

The Doctorate also aims to underline technology's moral and philosophical implications in artistic creation and scientific research. Sound mapping and compositional interpretations of ecosystems can become valuable tools to increase environmental awareness, highlight the importance of biodiversity and overcome deep-rooted cognitive biases, such as plant blindness. In this perspective, the project also takes on a particular value in the reevaluation of the territories, which can be investigated in their specificity thanks to sound mapping.

The Murgia Materana Park case study is a clear example of this. Given its total area of 8000 hectares, the flora of the Alta Murgia Park includes about 923 species, of which a hundred are species, playing a role of great importance in the biodiversity of the Murgia area.

Art. 5 – Protection clauses.

The activation of the DIN PhD Course is subject to the positive outcome of the accreditation procedure by the MUR, as provided for by Ministerial Decree no. 470/2024. In the event of a negative outcome of the accreditation procedure, with the consequent failure to activate the course and the announced assignment of the scholarships, the candidates will be promptly notified. They will not be able to retaliate in any way against the Conservatory.

Art. 6 – Admission requirements.

Candidates may apply for admission to the PhD Programme referred to in the previous article, without age or citizenship limits, who, by the deadline of this call, have one of the following academic and/or university qualifications or similar qualifications obtained abroad, recognised as equivalent to the above-mentioned second-level academic qualifications for the sole purpose of participating in the competition for admission to the Doctorate:



Master's Degree:

DCSL15 - Composizione
DCSL21 - Didattica della musica
DCSL34 - Musica elettronica
DCSL60 - Musica applicata
DCSL61 - Tecnico del suono
DCSL64 - Composizione jazz
DCSL15/A - Discipline storiche, critiche e analitiche della musica

University Graduation:

3/S (specialistiche in architettura del paesaggio)
4/S (specialistiche in architettura e ingegneria edile)
6/S (specialistiche in biologia)
10/S (specialistiche in conservazione dei beni architettonici e ambientali)
11/S (specialistiche in conservazione dei beni scientifici e della civiltà industriale)
13/S (specialistiche in editoria, comunicazione multimediale e giornalismo)
20/S (specialistiche in fisica)
21/S (specialistiche in geografia)
23/S (specialistiche in informatica)
24/S (specialistiche in informatica per le discipline umanistiche)
30/S (specialistiche in ingegneria delle telecomunicazioni)
32/S (specialistiche in ingegneria elettronica)
35/S (specialistiche in ingegneria informatica)
38/S (specialistiche in ingegneria per l'ambiente e il territorio)
45/S (specialistiche in matematica)
50/S (specialistiche in modellistica matematico-fisica per l'ingegneria)
51/S (specialistiche in musicologia e beni musicali)
82/S (specialistiche in scienze e tecnologie per l'ambiente e il territorio)
83/S (specialistiche in scienze economiche per l'ambiente e la cultura)
95/S (specialistiche in storia dell'arte)
96/S (specialistiche in storia della filosofia)
100/S (specialistiche in tecniche e metodi per la società dell'informazione)

The suitability of the foreign qualification is assessed by the Selection Committee for the sole purpose of carrying out the tests, without prejudice to subsequent checks carried out by the Administration in compliance with the regulations in force on the subject in Italy and in the country where the qualification was issued and international treaties or agreements on the recognition of qualifications for the continuation of studies.

It is also possible to apply for admission by those who obtain the qualification required by the call for applications by the date of enrolment in the PhD programme, under penalty of forfeiture of admission to the programme.

When applying for admission to the PhD programme, the candidate self-declares possessing the required qualification referred to in this article, pursuant to art. 46 and 47 of Law 445/2000.

The Matera Conservatory may carry out special checks, at any stage of the procedure, on the veracity of the substitute declarations made by the candidate. If the check ascertains the falsity of the content of the



declarations, the candidate will be excluded from taking the competition tests or, if already registered because he or she has won the competition, will be declared forfeited without prejudice to the criminal sanctions provided for by art. 76 of Law no. 445/2000.

Those who have already benefited, even partially, from a scholarship to attend PhD courses or equivalent courses at other universities in Italy cannot take advantage of another PhD scholarship.

Art. 7 – Admission procedure.

The application for admission, including the mandatory documentation, must be sent by certified mail to the **amministrazione.conservatoriomatera@legalmail.it** address by **12:00 (Italian time) on 15 September 2024**, under penalty of exclusion from this selection, attaching the form in Annex A (application form).

The email's subject must be of the type: "RESEARCH DOCTORATE - Surname Name". The application and all the documentation must be sent via a single file in PDF format, not exceeding 10 Mb.

Candidates must produce and attach the following:

- a) valid photo ID (ID card or passport), double-sided scan;
- b) dated curriculum vitae (no specific format required);
- c) research project (max 10.000 characters);
- d) any certifications pursuant to Law 104/92, as supplemented by Law 17/99, for candidates with disabilities and pursuant to Law 170/2010 for candidates with specific learning disabilities;
- e) proof (already included in Annex A) of the achievement of each academic qualification held by the candidate (access qualification and any additional academic / university qualifications) held, first and second level, indicating:
 1. Type of academic diploma or university degree (second level, old system, master's degree, single-cycle master's degree, etc.);
 2. AFAM institution or Italian university that issued the degree (or similar foreign institution);
 3. course name of Academic Diploma or University Degree;
 4. degree class (only if obtained in Italy);
 5. date the degree was awarded;
 6. final grade.

Documents that all candidates are required to attach must be produced in Italian or English.

For identity documents and qualifications issued in a language other than Italian, the official translation into Italian or English made by the institution that issued the qualification or by an authorised body must be attached. According to current legislation, the Matera Conservatory cannot accept certifications issued by other Italian public administrations. The qualifications held by the candidates, if issued by Italian academic institutions, must be self-certified.



Art. 8 – Examining Board

The examination committee in charge of evaluating the candidates will be appointed by decree by the Director of the Conservatory of Matera and made known through publication on the Conservatory's website. An administrative staff unit may act as a secretary for the minutes.

Art. 9 – Admission tests

Admission to the PhD program is a selection process based on qualifications and exams, which guarantees the comparative evaluation of the candidates. The selection aims to ascertain the preparation, knowledge, and aptitudes of the candidates for artistic research and their personal motivations. It will be carried out in two phases.

The first phase includes:

- an evaluation of the curriculum vitae and the scientific/artistic portfolio;
- evaluation of the research project presented.

The list of those who have passed the first phase will be communicated on the Conservatory website by 10.00 a.m. on 16 September 2024.

All those who have passed the first phase will be able to access the second phase in the presence, which includes:

- A written test on the doctorate topics;
- An interview aimed at verifying the candidate's skills, scientific qualities, interests and motivations, as well as his/her knowledge of the educational and scientific courses of the Doctorate and the aptitude for research.

The interview takes place in Italian; in any case, candidates are entitled to ask to take the test in English.

The written test and the oral interview will take place on 18 September 2024, starting at 10.00 a. m. at the headquarters of the Conservatory in Piazza del Sedile s.n.c., 75100 Matera (Italian time).

To take the tests, candidates must show a valid identity card or passport.

Art. 10 – Graduated.

Once the competition tests have been completed, the Selection Committee will draw up a special report indicating the evaluation criteria used, the score awarded to each candidate, and the final ranking will be published by a special Decree of the Director on the website of the Conservatory of Matera by 20 September 2024.



No personal communications will be sent, and the publication of the ranking list has the value of official communication to the interested parties.

In the event of a tie, the youngest candidate prevails, pursuant to art. 2, paragraph 9, of Law 191/1998.

Candidates who have renounced scholarships financed by PNRR funds under the PNRR as part of the 38th and 39th cycles will not be able to express interest in (nor be assigned to) positions financed with PNRR scholarships according to Ministerial Decree 629/2024.

The scrolling of the ranking occurs following express or tacit renunciation of the position. "Eligible non-winner" candidates for positions financed from PNRR funds according to Ministerial Decree 629/2024 will also participate in the procedures for scrolling through the rankings on positions that may be reallocated on the basis of resources and with the indications made available by the Ministry.

Art. 11 – Enrolment

Successful candidates are admitted to the PhD Program according to the order of the ranking list and up to the number of places in the competition and must apply for enrolment within the deadline indicated in the Directorial Decree for the publication of the merit ranking; after this term, they will be considered to have renounced (tacit renunciation).

For enrollment procedures, please refer to the guidelines available on the Conservatory website, starting from the date of publication of the ranking list.

Admitted candidates who have yet to obtain the admission qualification are enrolled "with reservations". The achievement of the degree must be communicated to the PhD Office by the date indicated in the Directorial Decree approving the ranking list and, in any case, before the course's start (30/11/2024). Any failure to obtain the degree will result in exclusion from the course.

Art. 12 – Scholarships.

The annual amount of each of the two scholarships amounts to € 16,243.00 gross. Social Security expenses are charged to the recipient.

The payment of scholarships is made through deferred monthly instalments.

Doctoral scholarships cannot be combined with other scholarships or forms of subsidies from the university budget and/or the State source, except those granted by national or foreign institutions needed to

The doctoral program requires a full-time commitment.

The Doctoral Board may authorise the doctoral student to undertake paid activities that allow him to acquire skills concerning the educational field of the Doctorate after assessing the compatibility of the same activities with the profitable performance of the training, teaching and research activities of the doctoral course.



PhD students carry out, as an integral part of the training project, subject to the authorisation of the Doctoral Board and without increasing the amount of the scholarship, tutoring activities, possibly remunerated with resources from the Institutions of students of first and second-level academic diploma courses, as well as supplementary teaching activities.

The scholarships are confirmed with the transfer of the doctoral students to the following year unless the Academic Board has decided otherwise.

Art. 13 – Doctoral candidates’ obligations and rights.

The obligations and rights of doctoral students are specified in the Regulations of the PhD Program.

For admission to the following year and confirmation of the scholarship, the PhD student must complete the program of activities planned in the previous year and pass the progress checks established by the PhD Teaching Board and the Curriculum Coordinator.

In cases of non-compliance or prolonged absence, exclusion from the continuation of the course and the consequent revocation of the scholarship may be ordered. In this case, the PhD student is required to return the amounts paid in the last academic year of enrolment.

Public employees admitted to a doctoral course benefit from the benefits provided by collective bargaining or, if employed under public law, by Article 2 of Law 476/1984.

Any periods of suspension, not exceeding a total of six months, maybe authorised compatibly with the provisions of the Course Regulations.

Art. 14 – Awarding of the PhD degree.

The final title of PhD is awarded following the positive evaluation of a research work that contributes to the advancement of knowledge or methodologies in the chosen field of investigation.

The doctoral thesis must present the results of the research path and consist of an artistic product or a project, accompanied by a text specifying the methodologies, the scientific process, and the bibliographic references written in Italian or English.

The work may also consist of a scientific product in the artistic or design field, presented in a text with the characteristics referred to in the previous sentence.

The research work, together with the report on the activities carried out during the doctoral course, will be examined by at least two examiners identified by the board of doctoral professors, not belonging to the institution that issues the doctoral degree and in possession of highly qualified experience, at least one of whom is an AFAM professor.

The examiners can belong to foreign or international institutions.



Within 30 days of receipt of the research paper, the examiners express a written analytical judgment, proposing admission to the public discussion or postponement of the discussion for a period not exceeding six months.

After this period, the final research work, accompanied by a new written opinion given by the examiners, is, in any case, admitted to discussion.

The discussion occurs publicly before a commission is appointed in the manner established in the general teaching regulations, with respect, where possible, to gender balance.

In any case, at least two-thirds of the commission is composed of individuals belonging to Italian or foreign institutions not belonging to the institution that provides the course from AFAM institutions.

At the end of the discussion, the commission expresses a written and motivated judgment on the research work presented in the thesis and, when it unanimously recognises its particular scientific/artistic importance,

Art. 15- Properties of results

Intellectual and industrial property rights to any results achieved by the doctoral student, including but not limited to software, patentable or unpatentable industrial inventions, know-how, models, data and data collections, are governed in accordance with current regulations and, if necessary, according to what is established in the individual agreements with third parties. The doctoral student is obliged to notify the Supervisor and the Doctoral Coordinator without delay of the achievement of the results, undertaking not to disclose or use them without the prior authorisation of the Matera Conservatory. The doctoral student is, moreover, required to sign an appropriate undertaking of confidentiality and recognition of intellectual property rights in relation to the information, data and documents of a confidential nature of which he/she should become aware in the performance of his/her activity in and/or on behalf of the Matera Conservatory. The doctoral student is, in any case, guaranteed the possibility of carrying out the ordinary publication activities envisaged by the training course (dissemination of results), which must be scheduled in a manner compatible with the protection of any results.

Art. 16 – Personal Data Processing

According to art. 13 of EU Regulation no. 2016/679 (hereinafter "GDPR 2016/679"), the personal data provided will be processed in compliance with the aforementioned legislation as well as Legislative Decree 196/2003, as amended by Legislative Decree 101/2018.

The processing of personal data provided by candidates when participating in this call, or in any case acquired for this purpose by the Institute, is aimed solely at carrying out the related administrative procedures and will be carried out by the persons in charge of the procedure, including by the examining committee.

This processing will also take place with the use of procedures, including computerised ones, in the ways and within the limits necessary to pursue the aforementioned purposes, even in the event of any



communication to third parties. The provision of such data is necessary to verify the requirements for participation and the possession of qualifications, and their failure to indicate them may preclude such verifications. The Conservatory of Matera guarantees interested parties the exercise of the right of access pursuant to art. 15 GDPR 2016/679 and, where applicable, the rights of rectification (art. 16 GDPR 2016/679), erasure (art. 17 GDPR 2016/679), limitation of processing (art. 18 GDPR 2016/679), data portability (art. 20 GDPR 2016/679), objection to processing (art. 21 GDPR 2016/679) and withdrawal of consent. Without prejudice to any other administrative or judicial remedy, should he/she deem that the data processing is carried out in violation of the GDPR 2016/679 or Legislative Decree no. 196 of 30 June 2006 as amended by Legislative Decree 101/2018, each data subject has the right to lodge a complaint with the Guarantor for the protection of personal data following the procedures and indications published on the official website of the [https:// Authority www.garanteprivacy.it](https://www.garanteprivacy.it). Without prejudice to any other administrative or judicial remedy, should he/she deem that the data processing is carried out in violation of the GDPR 2016/679 or Legislative Decree no. 196 of 30 June 2006 as amended by Legislative Decree 101/2018, each data subject has the right to lodge a complaint with the Guarantor for the protection of personal data following the procedures and indications published on the official website of the [https:// Authority www.garanteprivacy.it](https://www.garanteprivacy.it).

Art. 17 – Publication

The Call for admission to the PhD course is published for at least thirty days on the website of the Conservatory of Matera, on the European website Euraxess and on the website of the Ministry of University and Research.

Art. 18 – Reference Regulations and Procedure Manager

For anything not provided for in this call, please refer to the Teaching Regulations available on the website of the Matera Conservatory and the regulations on the subject of the PhD. Any changes or additions to the announcement will be announced on the competition web page. According to Law 241/1990, the person in charge of the selection procedure is the Director of the Conservatory, Prof. Carmine Antonio Catenazzo (direzione@conservatoriomatera.it).

The Director
(Prof. C. A. Catenazzo)