## Federico Nicolás Cámara Halac

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## Education

### PhD

2019

Music Composition and Theory, New York University. Graduate School of Arts and Sciences. Dissertation title: "Database Music: A History, Technology, and Aesthetics of the Database in Music Composition". Advisor: Jaime Oliver La Rosa (NYU GSAS). Readers: Elizabeth Hoffman (NYU GSAS), Martin Daughtry (NYU GSAS), William Brent (American University), and Robert Rowe (NYU Steinhardt). New York, NY (USA). Sep 2013 - Jun 2019.

#### Licenciate

2012

Music Composition, Universidad Nacional de Córdoba. Facultad de Artes. Thesis Title: "A Form of Pleasure: Music as an Experience of Pleasure". Advisor: José Halac. Readers: Eleazar Garzón, Sergio Poblete, Claudio Bazán, and Pablo de Giusto (Bachelor and Masters equivalence). Córdoba (Argentina). Mar 2006 - Jul 2012.

# Professional Appointments

### Postdoctorate

2021

Postdoctoral Scholar in Immersive Audio, The Ohio State University. Global Arts and Humanities Discovery Theme, School of Music, Advanced Computing Center for the Arts and Design. Columbus, OH (USA). 2019-2021.

# Research Interests

Computer Music. Spatial Audio. Immersive Sound. Machine Learning. Digital Signal Processing. Algorithmic Composition. Computer Vision. Networked Performance Music. Sonification. Database Music.

# **Publications**

# Conference Proceedings

2021 | Sep Visual Cues as an Aid in the Auditory Stream Segregation of Music. International Conference on Music Perception and Cognition - European Society for the Cognitive Sciences of Music. Samantha Burgess, Federico Camara Halac, and Daniel Shanahan. 28 September 2021.

August 'The Woods:' A Mixed Reality Two-Player Cooperative Game. SIGGRAPH. Scott Swearingen, Kyoung Swearingen, Federico Camara Halac, Sruthi Ammannagari, and Matt Hall. 09 August 2021.

July **DreamSound: Deep Activation Layer Sonification.** International Community for Auditory Displays. Federico Camara Halac and Matias Delgadino. 25 July 2021.

February Comparing Musical Performances of the 'Goldberg Variations' Using Supervised Machine Learning Techniques. Future Directions of Music Cognition (Accepted but not presented). Arturo Barrios, Leo A. Glowacki, Lindsay Warrenburg, and Federico Camara Halac. 12 February 2021.

### Conference Poster

PathoSonic: Performing Sound In Virtual Reality Feature Space.

New Interfaces for Musical Expression. Federico Camara Halac and Shadrick Addy. 24 January 2020.

#### Conference Panel

[clone fd\_dacout]: real-time massively multichannel spatialization in Pure Data. Jornadas de Informática y Electrónica Musical - Espacios Sonoros. 05 March 2020.

### PhD Dissertation Defense

Database Music: A History, Technology, and Aesthetics of the Database in Music Composition. New York University. 06 May 2019.

# Guest Speaker

- 2021 | Sep A History of the Database in Computer Music. Festival Atemporáneas. 13 September 2021.
- 2018 | Jun Composing Database: Opening A Space For The Concept Of An Anarchic Unwork Of Art.. Delian Academy for New Music. 11 June 2018.

Inopera: A Multimedia Work for Loadbang and Pure Data.

Universidad Nacional de Córdoba. 15 June 2016.

## Other Publications

2017 'For Young Years:' A Response To Elsa Justel's Marelle. Open Space Magazine - Issue 21 . 10 August 2017.

# **Awards and Honors**

# **Fellowships**

2016

$2018 \mid \text{Sep}$	Dean's Dissertation. Graduate School of Arts and Sciences (New York
	University). Berlin (Germany).
January	Graduate Research Initiative. Provost (New York University).
	Florence (Italy) and Paris (France). 2018 and 2017
2013   Sep	The Henry M. MacCracken Program. Graduate School of Arts and
·	Sciences (New York University). New York City (USA).

### **Prizes**

2015 and	"Ciudad Invertida" and "Venas" (Selected Works) Elsa Justel
2014	(Fundación Destellos). Mar del Plata (Argentina).
2011   Jul	"Lagos" (Orchestral Premiere). Orquesta Sinfónica de la UNC -
	Músicas en Dirigible (Universidad Nacional de Córdoba). Córdoba
	(Argentina).

## Conference Funds

2017 **Student Senators Council.** Graduate School of Arts and Sciences (New York University). Shanghai (China).

# Exchange Program

2012 **Programa Cuarto Centenario.** Prosecretaría de Relaciones Internacionales (Universidad Nacional de Córdoba and Université de Montréal). Montréal (Canada).

# Performances

#### Solo

2010	
2020   Mar	Concierto de arte sonoro en Espacio B. Ricardo Barney & Pedro
	Fraguela. Laptop. Espacio B - Madrid (Spain). 04 March 2020.
2017   Aug	Lorenz Variations. Cube Fest at Virginia Tech - Blacksburgh, VA
	(USA). 03 August 2017.

2016 | Oct Opening Portals. Jessica Rosen. Bookentiometers. ShapeShifter Lab in Brooklyn - New York City, NY (USA). 11 October 2016.

## The Sonic Arts Ensemble at OSU

- 2021 | Jun 8th Music and/as Process Conference: Networked Collaborative Processes 2021. Thornblower. Netty McNetface Columbus, OH (USA). 26 June 2021.
- April SEAMUS (TWELVE). Thornblower. CCRMA Stanford, CA (USA). 23 April 2021.

Earth Day Art Model 2021. Thornblower. EDAM Festival - Indianapolis, IA (USA). 22 April 2021.

Sonic Arts Ensemble Live-Stream Performance. Thornblower. Netty McNetface - Columbus, OH (USA). 06 April 2021.

- 2020 | Oct Into The Multiverse. Thornblower. The Wexner Center for the Arts Columbus, OH (USA). 20 October 2020.
- 2019 | Sep Sonic Arts Ensemble and Atelier Avant Austria present "Virtuoso Chances". Andreas Weixler, Se-Lien Chuang, Marc Ainger, Ann Stimmson, and the Sonic Arts Ensemble. Pure Data, joyosc, and a PS4 Controller. ACCAD Motion Lab Columbus, OH (USA). 23 September 2019.

## Hijos de Distinta Madre

- 2020 | May **CyberJam en La Cupula.** Pure Data, joyosc, and a PS4 Controller. La Cupula Galeria de Arte Córdoba (Argentina). 09 May 2020.
- 2019 | Dec **HDDM** + **ffddcchh** + **Marmotas Dreams & friends.** Pure Data, joyosc, and a PS4 Controller. La Cupula Galeria de Arte Córdoba (Argentina). 21 December 2019.

**HDDM** + **ffddcchh.** Pure Data, joyosc, and a PS4 Controller. Casa Mandarina - Córdoba (Argentina). 19 December 2019.

Mermetom + Fede Camara Halac. Mermetom (Gustavo Alcaraz & Vero Guevara) and . Pure Data, joyosc, and a PS4 Controller. La Cupula Galeria de Arte - Córdoba (Argentina). 08 December 2019.

### Live Video and Electronics

- 2017 | Jun **Electroacoustic Improvisations..** Joan Bages i Rubi, Bernardo Barros, Kyle Motl, and Joan Marti Frasquier,. Midi controller and Laptop. NYU Waverly Labs r.220 New York City, NY (USA). 19 June 2017.
- April a.le.a. Talea Ensemble. Midi controller and networked Laptops. The Dimenna Center for Classical Music New York City, NY (USA). 07 April 2017.
- 2016 | Nov **Ciudad Invertida.** RAGE THORMBONES. Laptop. ShapeShifter Lab New York City, NY (USA). 22 November 2016.

- September sk. TAK Ensemble. Laptop. Waverly Labs, r.220 New York City, NY (USA). 29 September 2016.
- April INOPERA. Loadbang Ensemble. Midi controller and Laptop. The Dimenna Center for Classical Music New York City, NY (USA). 20 April 2016.
- 2015 | Aug Ciudad Invertida. Rocío Elizalde y Manuel Pastrana. Laptop. Bienal 3 en Composición e Investigación Musical Córdoba (Argentina). 20 August 2015.
- February Mise-En at German House. Samuel Marques. Pure Data live processing. German Consulate New York City, NY (USA). 06 February 2015.

## LEIM Ensamble

- 2012 | Aug Ciclo Experimentalia. Piano, Analog Synthesizer. Centro Cultural España Córdoba Córdoba (Argentina). 10 August 2012.
- 2011 | Nov **Summer Concert.** Piano, Analog Synthesizer. Auditorio CePIA Córdoba (Argentina). 10 November 2011.
- October **Teatro Acústico.** Piano, Analog Synthesizer. Facultad de Artes, UNC Córdoba (Argentina). 02 October 2011.
- September Ciclo Contengo-Arte. Piano, Analog Synthesizer. Instituto Italiano de Cultura Córdoba (Argentina). 14 September 2011.

  Micro-Symposio de Análisis Musical. Piano, Analog Synthesizer.
  Facultad de Artes, UNC Córdoba (Argentina). 12 September 2011.
- August Winter Concert. Piano, Analog Synthesizer. Auditorio CePIA Córdoba (Argentina). 23 August 2011.
- June Ciclo Experimentalia. Piano, Analog Synthesizer. Centro Cultural España Córdoba Córdoba (Argentina). 20 June 2011.
- May **TSONAMI.** Piano, Analog Synthesizer. Centro Cultural Recoleta Buenos Aires (Argentina). 10 May 2011.
- 2010 | Dec Nosocomio. Piano, Analog Synthesizer. Centro Cultural España Córdoba Córdoba (Argentina). 12 December 2010.
- November **Summer Concert.** Piano, Analog Synthesizer. Auditorio CePIA Córdoba (Argentina). 14 November 2010.
- September 1st International Biennial of Music Composition and Education. Piano, Analog Synthesizer. Auditorio CePIA - Córdoba (Argentina). 14 September 2010.
- 2009 | Jan **Performances and Workshops.** Piano, Analog Synthesizer. LEIM Facultad de Artes Córdoba (Argentina). 01 January 2009.

# Proyecto [Red] Ensamble

- 2016 | Aug Canon. Midi controller and Laptop. Centro Cultural Graciela Carena New York City, NY (USA). 06 August 2016.
- 2012 | Nov Concert. Piano. Auditorio CePIA Córdoba (Argentina). 12 November 2012.

Aniversario de la Facultad de Artes. Piano, Trumpet, Midi Controller. Auditorio CePIA - Córdoba (Argentina). 01 November 2012.

- September John Cage Festival. Piano. Auditorio CePIA Córdoba (Argentina). 05 September 2012.
- August Concert at B2CIM. Piano, Trumpet, Midi Controller. Auditorio CePIA Córdoba (Argentina). 23 August 2012.
- June Concierto de Alquimistas. Piano. Aula Magna FCEFyN Córdoba (Argentina). 29 June 2012.

  Concierto Final de Tesis. Piano. Auditorio CePIA Córdoba (Argentina). 12 June 2012.
- 2011 | Oct Congreso de Ciencias Humana. Electric Guitar. Escuela Monserrat Córdoba (Argentina). 20 October 2011.
- September Micro-Symposium de Análisis Musical. Piano. Aula Magna de la Facultad de Artes Córdoba (Argentina). 10 September 2011.
- August Arte Forum 2: Homage to Oscar Bazán. Piano. Auditorio CePIA Córdoba (Argentina). 18 August 2011.
- July Winter Concert. Electric Guitar, Piano. Auditorio CePIA Córdoba (Argentina). 10 July 2011.
- 2010 | Nov **Summer Concert.** Conductor. Auditorio CePIA Córdoba (Argentina). 20 November 2010.
- July Ciclo La Máquina de Tiempo. Trumpet. Centro Cultural España Córdoba Córdoba (Argentina). 02 July 2010.

#### Other Roles

- 2020 | Jan CLIMATE GATHERING. Norah Zuniga Shaw. Max/MSP and Ipad. Movement Lab at Barnard College New York City, NY (USA). 15 January 2020.
- 2012 | Mar **Guest Pianist.** LAMOI. Piano. Paseo del Buen Pastor Córdoba (Argentina). 10 March 2012.
- 2010 | Sep Inserto Beat. Luisina Couto, Pablo Behm. Guitar. Cineclub Municipal Hugo del Carril Córdoba (Argentina). 18 September 2010.
- March **Guest Pianist.** Orquesta Sinfónica de Rio Ceballos. Piano. Teatro Municipal Rio Ceballos, CBA (Argentina). 12 March 2010.

# **Teaching**

### **Professor**

- 2021 | Mar Computational Musicology 8824. The Ohio State University. School of Music. Columbus, OH (USA). Spring 2021.
- September Sonic Arts Ensemble. The Ohio State University. Advanced Computing Center for the Arts and Design. Columbus, OH (USA). Fall Spring 2020, Fall 2019.
- 2015 **Harmony and Counterpoint I.** New York University. Faculty of Arts and Science. New York, NY (USA). Fall 2015.

#### Course Assistant

2016 Computer Music Theory and Techniques. New York University. Faculty of Arts and Science. New York, NY (USA). Fall 2016.

## Teaching Assistant

- 2015 | Mar Harmony and Counterpoint II. New York University. Faculty of Arts and Science. New York, NY (USA). Spring 2015.
- 2014 | Sep Harmony and Counterpoint I. New York University. Faculty of Arts and Science. New York, NY (USA). Fall 2014.
- 2010 | Jan **Composición Musical I.** Universidad Nacional de Córdoba. Facultad de Artes. Cordoba, CBA (ARG). 2010 and 2009
- 2008 **Audioperceptiva I.** Universidad Nacional de Córdoba. Escuela de Artes FFyH. Cordoba, CBA (ARG). 2008 and 2007

# **Artistic Collaborations**

### **Networked Performance Music**

- 2021 | Jan **1002: A Networked Music Performance with CollidePd** (ongoing). International Computer Music Conference. Federico Ragessi. Córdoba (Argentina).
- 2020 | Mar **The Sonic Arts Ensemble at OSU** (ongoing). Advanced Computing Center for the Arts and Design. Marc Ainger and Ann Stimson. Columbus, OH (USA).

#### Installations

- 2019 | Sep **The Woods** (ongoing). Advanced Computing Center for the Arts and Design. Kyoung Swearingen, Scott Swearingen, Marc Ainger, Sruthi Ammanngari, and Matt Hall. Columbus, OH (USA).
- 2017 | Oct Hearing the Self: A Spectral Experience. Xuhui Art Muesum. Matias Delgadino and Lucia Simonelli. Shanghai (China).

#### Theatre

- 2013 | Oct **Poroto.** Pabellón Azul UNC . Celeste Lozada and Valentina Echeverría. Córdoba (Argentina).
- 2012 | Sep Itinerante: un Viaje a Través de Los Sentidos. Sindicato de Vendendores de Diarios y Revistas. Agustina Muñoz. Córdoba (Argentina).
- 2011 | May **Tesis de Licenciatura de Teatro.** Plazoleta del Fundador. Luisina Couto. Córdoba (Argentina).
- 2010 | Apr Inserto Beat. Cineclub Municipal Hugo del Carril. Luisina Couto. Córdoba (Argentina).

## Other Collaborations

- 2013 | Feb Los Chicos de Abril (Opera). Teatro Municipal de Río Cuarto. Luis Perez, Pablo Behm, and Franco Pellini. Rio Cuarto, CBA (Argentina).
- 2011 | Aug Al Cielo o al Infierno (Film). Cines Gran Rex. Lauro Racosky. Córdoba (Argentina).
- 2010 | May Alicia en el País de las Maravillas (Dance). Teatro del Libertador San Martín. José Halac. Córdoba (Argentina).

## Service

# Disciplinary Service

2020   Jan	New Interfaces for Musical Expression (ongoing). Reviewer. Paper
	and Installation submissions. New York City (USA).
2019	<b>Festival Atemporaneas.</b> Reviewer. Installation, Audiovisual, and Sound Art submissions. Buenos Aires (Argentina). 2019-2020.
2018	New York City Electroacoustic Music Festival (ongoing). Reviewer.
	Music submissions. New York City (USA).
	International Computer Music Conference (ongoing). Reviewer.
	Installations and Music Submissions. New York City (USA).
2016	PdCon16~. Organizer. Website and Conference Program. New York City
	(USA).
2010	Bienal Composición Córdoba. Organizer. Website and Conference

# University Service

2013 | Jan **Waverly Project.** Founding Member. Website and Program. New York City (USA). 2013-2017.

Program. Córdoba (Argentina). 2010-2015.

2010 **Proyecto** [Red] Ensamble. Founding Member. Website and Program. Córdoba (Argentina). 2010-2015.

# Other Skills

Code

Languages Spanish (Native) English (Advanced) French (Intermediate) German (Beginnder, A2 Level. Currently Studying.)

Pure Data (Expert) Python (Advanced: Numpy, Scipy, tensorflow,

librosa) **JavaScript** (Advanced: Web Audio API, Node.js) **C** (Pure Data Externals) **C++** (GEM and Max MSP Externals) **Bash** (Server-side scripting) **HTML** (Web Publishing with CSS) **LATEX** (Text Publishing)

Git (Version management, software release)

Software Max/MSP. Csound. Jacktrip. Audacity. REAPER. Ableton Live.

Adobe Creative Suite.