

GUGGENHEIM BILBAO **XX** 1997  
2017

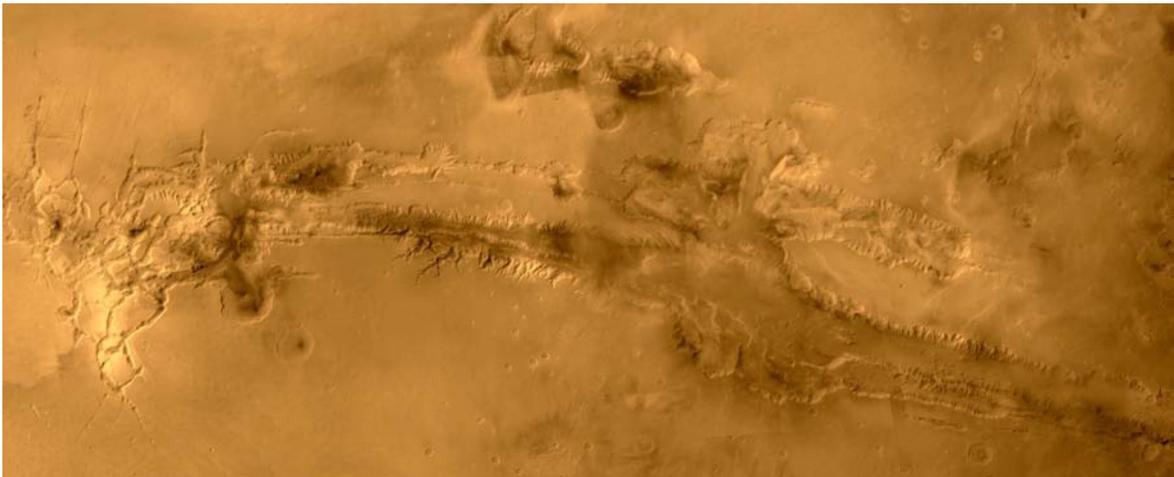


In collaboration with:



**Chasma** [plural, *chasmata*]: *Astrogeology*. A deep, elongated, steep-sided valley or gorge on a planet's rocky surface. This term is regulated by the International Astronomical Union and is part of the prescribed nomenclature for new chasmata, as follows: *name* followed by the word *chasma* [e.g., Candor Chasma].

*CHASMATA* is the result of blending astrogeology with the architecture of Frank Gehry. In other words, this project views the architectural folds, intricacies, and wrinkles of the Guggenheim Museum Bilbao building as an exogeological matter: unique, out-of-this-world spaces which, thanks to science, serve as points of contact and understanding between various disciplines, primordial elements and sophisticated objects of poetic inspiration.



*[Valles Marineris is the largest Mar's chasmata system and the Solar System's biggest depression.  
Dimensions: 4.500 x 200 x 11 km]*

## Chasmata

20th Anniversary of the Guggenheim Museum Bilbao



Candor Chasma, Valles Marineris, Mars (6° S - 290° E). ©ESA/DLR/FU Berlin (G. Neukum)

### Title

*Chasmata*

XX Anniversary of the Guggenheim Museum Bilbao

### Category

Total artistic experience [*Gesamtkunstwerk*]

astrogeology | architecture | instrumental music | sound art | electronic music | visual art | sculpture

### Duration

80 minutes



*Chasmata* is a project produced by The DK <projection>

## Program

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### CHASMATA

20th Anniversary of Guggenheim Museum Bilbao

Composed by Ángel Arranz [AA] and José López-Montes [JLM],  
with the collaboration of Íñigo Ibaibarriaga [II], Casper Schipper [CS] and Alba G. Corral [AgC].  
For saxophone ensembles, electronics, cell phones, sculpture, and multiprojections.  
A project realized with the collaboration of European Space Agency [ESA]

Guggenheim Museum Bilbao Atrium – Frank Gehry

### Serraphonie [AA & CS]

12'

bass saxophone quartet and electronics  
on the resonances of Richard Serra's sculptures *The Matter of Time*

### Juventae Chasma [JLM, II & AgC]

09'

saxophone solo, electronics, and video

### Ius Chasma [JLM]

17'

three saxophone quartets and video

### Message from the International Space Station [ISS]

05'

Juan Ignacio Vidarte  
Pedro Duque  
Paolo Nespoli

Director General, Guggenheim Museum Bilbao  
ESA Astronaut  
ESA Astronaut

### Valles Marineris [AA, JLM, CS & AgC]

for bass saxophone quartet, saxophone octet, baritone saxophone solo,  
100 saxophone orchestra, massive cell phone orchestra, 17-channel electronics and video

I

#### Candor Chasma

07'

saxophone octet, electronics, and video

II

#### callingHiggs

11'

for massive cell phone orchestra and video

III

#### Valles Marineris

17'

for bass saxophone quartet, baritone sax solo,  
100 saxophone orchestra, 17-channel electronics and video

## Artistic team

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### **Sigma Project Quartet**

Andrés Gomis  
Josetxo Silguero  
Ángel Soria  
Alberto Chaves

saxophone quartet

### **Het Nederlands Saxofoon Octet**

David Cristóbal Litago  
Evgeni Novikov  
Jenita Veurink  
Dineke Nauta  
Stefan de Wijs  
Nina van Helvert  
Marije Schröer  
Juan Manuel Domínguez

saxophone octet

### **Íñigo Ibaibarriaga – Laboratorio KLEM**

saxophone solo

### **Chasmata Orchestra**

100 saxophone orchestra

### **Casper Schipper**

**Alba G. Corral**

17-channel ambisonic speaker system (Ziggurat)  
video creation

### **Matilda Hofman**

**Maite Aurrekoetxea**

first conductor  
second conductor

### **Juan Antonio Ros**

**César G. Linares**

**Planet Devices**

**Láser AV**

sound engineer  
lighting  
app *callingHiggs* programming  
video projection system

### **José López-Montes**

**Ángel Arranz**

video creation and big data processing  
electronics and artistic direction

## Chasmata Orchestra

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Adrián San Román Alves  
Aicha Chekroun Casas  
Ainara Moreno González  
Ainara Rueda Molina  
Aitor Álvarez Zazo  
Aitor Nova Álvarez  
Aitor Otegi Beares  
Alain Sancho  
Alazne Gil García  
Alberto Mielgo Hernández  
Alfonso Vila  
Amaia Gómez  
Ana Isabel Bravo González  
Ander Fernández Elizegi  
Ander Goikoetxea Lasa  
Andrea Nieto De Las Heras  
Anton Gómez Martín  
Ariany Carrero Hernández  
Arkaitz Lizarribar  
Arrieta Armentia  
Asier Bravo Navarro  
Asier San Román Alves  
Carla Bañales Martos  
Dana Salgado López  
Danel Zubeldia  
Edgar Liberal  
Elisabet Elizalde Chasco  
Enara Eguileta Delgado  
Endika Ibarguren Ballesteros  
Eneko Arraibi Zamalloa  
Enrike Arostegi Eguzkiza  
Fabio Orrantia Plaza  
Garazi Motoso Ruiz de Eguino  
Gorka Elosua Barandiaran  
Gorka García Ruiz de Azua  
Guillermo Presa Santana  
Hugo Domínguez Alfageme  
Idoia Méndez Aresti  
Idoia Mujika Zabalo  
Idoia Ugalde Olabarrieta  
Igor Crespo  
Iker Gil Torres  
Iker Larrabeiti  
Iker Nieto Anzorandia  
Imanol Gutiérrez Pinedo  
Intza Urrestarazu Agirre  
Iñaki Lizarraga Aranzabal  
Íñigo Fernández Elorriaga  
Íñigo Montero Zabaleta  
Irene Ruiz de Austri Izagirre  
Itsaso Bolinaga Saldaña  
Itziar Castrillo Pérez  
Iunan Barambones López de Letona  
Iván Aliseda González  
Jaione Elosua Barandiaran  
Javier Sainz Anaut  
Javier Valderrama Lorent  
Jon Bas Campos  
Jon Wigerfelt Holgado  
Jorge Beñat Oribe  
Joseba Astigarraga Iriondo  
Josu Figueiredo Beceiro  
Josu Léniz Lasa  
Judith Montero Imaz  
Julen Arozamena Goitia  
Julen Yarritu Atxa  
Julene Otazua  
Juna María Oribe Cabieces  
Jurgi Pérez Campo  
Kati Ormazabal Iparragirre  
Leire Martín Gómez  
Leire Txapartegi Beltrán de Heredia  
Lexuri Armentia Uribe  
Maialen Areitioaurtena Oiartzun  
Mar Andino Vidal  
Marcos Rodríguez Blanco  
María Alvarado  
María Sajeras  
Markel Lizarraga Azanza  
Markel Mardaras Bisquert  
Marta Velasco  
Martín Gabiria Elejabarrieta  
Martín Gorospe Elorza  
Miguel Martínez Serrano  
Miren Legido Pérez de San Román  
Miren Lutxi Larreategui Ercoreca  
Natale Ormazabal Velázquez  
Noemí Araujo Gómez  
Norah Redondo Andrés  
Oihane Nadal Autor  
Peio Martínez Guaresti  
Peio Vila Parada  
Ricardo Samano Calvo  
Roberto Pacheco García  
Rubén Bellido Cereijo  
Santiago García García  
Sofía Salgado Lorenzo  
Susana Mellado  
Tamara García Rodríguez  
Teresa Sánchez Jauregui  
Unai Eguren Arregi  
Usue Barrio  
Xabat Iruin  
Xavier Wigerfelt Holgado

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## Big data

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Big data experts team collaborating in The DK <projection> in the *Chasmata* project:

<b>Alejandro Cardesín Moineo</b>	Operations Engineer Mars Express and ExoMars [ESA]
<b>Francisco González-Galindo</b>	Interdisciplinary Scientist of the mission Mars Express [Instituto de Astrofísica de Andalucía-CSIC]
<b>Miguel Molina-Solana</b>	Big data processing expert [Data Science Institute-Imperial College London]
<b>Beatriz Sánchez-Cano</b>	Mars' Ionosphere Researcher [University of Leicester]

## Thanks to

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Conservatorio de Bilbao Juan Crisóstomo Arriaga

Conservatorio de Vitoria-Gasteiz Jesús Guridi

Azkuna Zentroa

Data Science Institute Imperial College London

Project UE-H2020 UPWARDS Understanding Planet Mars

A special thanks to the *callingHiggs' beta testers*:

Alejandro Recio	María Jesús Portugal
Antonio García Ruiz	María del Carmen Requejo Díez
Ascensión Aguado	Mercedes Calvo Sanz
Carmen Martín Sanz	Mercedes Linares
Carmina Alonso	M <sup>a</sup> Henar Olmos Flores
Diego Vincenz	M <sup>a</sup> Luz Ortiz Fernández
Elías Arranz Martín	Pablo González
Ester Marca Beas	Rosa Almirón Cuadros
Gemma Arranz	Rubén Jiménez Urbano
Isabel Arranz Martín	Rubén Rojo Gutiérrez
José Félix Nieto	Verónica García-Muñoz Pérez
Juan de Dios Ramírez Higuera	Víctor Costela Pérez
Judit Paredes	Víctor Cruz García

## Chasmata

*Chasmata* is a 21st-century total experience [*Gesamtkunstwerk*] designed by The DK <projection> to mark the 20th Anniversary of the Guggenheim Museum Bilbao in 2017. The project is a slow-cooked stew of various disciplines [astrogeology, architecture, instrumental music, sound art, electronic music, visual art, and sculpture] that revolves around saxophone culture and new technology. The idea is to create one plait by intertwining the strands of two great narrative threads, both inexhaustible sources of inspiration: astrogeology and the architecture of Frank Gehry.

The European Space Agency [ESA] is the artistic and scientific marrow that nourishes *Chasmata*. Through art, the project aims to connect the public with ESA, the European continent's gateway to outer space, against the singular backdrop of the Guggenheim Museum Bilbao's 20th Anniversary celebration. From its office in Madrid [ESAC], the agency establishes a zone of cross-disciplinary cooperation, providing a group of artists with scientific material [theoretical frameworks, data, images, etc.] gleaned from recent studies about planet Mars, creating a space of reflection and planting the seed for a groundbreaking project in this field, blazing an unexplored trail across the territory between art and science.

*Chasmata* is an organic spectacle that will allow visitors to rediscover the Guggenheim Museum Bilbao from a fresh new perspective of Frank Gehry's Atrium. The concert will close with the most ambitious piece in the series, *Valles Marineris*, played by around 120 saxophones distributed among the balconies overlooking the Atrium and accompanied by a 17-channel site-specific created ambisonic speaker system installation [Ziggurat] and high-definition unpublished images from Mars.

*Chasmata* proposes a perfect symbiosis of music and Frank Gehry's architectural spaces with the aim of creating a series of site-specific pieces. A technical and artistic team visited the locations in advance in order to gather geometrical, acoustic, sensory, and poetic information on the building that was later be used to compose the pieces and determine their presentation strategy. All of this was subsequently put together with the scientific data to achieve an integrated artistic expression.

## ESA

Working through its office in Madrid [ESAC], the European Space Agency [ESA]—the European continent’s gateway to outer space—provided access to scientific material from recent orographic, atmosphere, and ionosphere studies of the planet Mars. This material was used to create both sound and visual art.

With this material, *Chasmata* devised an organic series of compositions for different saxophone ensembles (solo, quartet, octet, twelve saxophones, an orchestra of 100 saxophones) and incorporated electronic surround-sound devices and high-definition image projections.



The ESA will also be involved in the most exciting moment of the evening, when the audience will receive a special message from the International Space Station [ISS]. In addition to that, this congratulation message to the Museum on its 20th Anniversary from outer space will become a multimedia artwork, since audio and video signal will be used as digital raw material for composing the electronic parts of the concert’s spectacular grand finale: *Valles Marineris*.

## Why Mars?

Since 1877, when Giovanni Schiaparelli began to observe it as a scientific object, Mars has been studied by people eager to unlock its mysteries, never more so than today. The large number of probes sent out during the mid- to late-20th century (the Marsnik, Mariner and Viking probes), especially after the first lunar landing, testify to the enduring importance of this planet in the international space race.



Juventae Chasma, Mars (5° S, 298° E) © ESA/DLR/FU Berlin (G. Neukum)

Today Mars continues to fascinate us, inspiring countless speculations among the scientific community and the general public. New devices launched have been capable of analyzing soil samples and capturing hitherto inconceivable images, with evidence suggesting the presence of water on the planet and the possibility that this extraterrestrial environment could support microbial life.

*Chasmata* shares this desire to explore the hidden, unknown corners of the cosmos through the union of science and art. This fascination is what inspired *Chasmata* to make the geography of Mars our artistic, scientific, poetic, and intellectual focus. The project's goal is to transcend the limits of art by venturing beyond the observable realm in search of the ultimate reason for existence, reaffirming human values in a cross-disciplinary endeavor that unites the purposes of the ESA and the Guggenheim Museum Bilbao in one grand expression for all of society to enjoy and explore.

## Program commentary

*Serraphonie* takes as an element of sound production the sculpture installation *The Matter of Time* by artist Richard Serra. An effective organization of the bass saxophones along with a series of amplifiers strategically placed among the sculptures will manage to capture the acoustic “soul” of each one by recording them, making the sculptures the true instruments of the piece.

The cycle conformed by the three pieces *Juventae Chasma*, *Ius Chasma* and *Candor Chasma* is based on data from different instruments from Mars Express European Space Agency’s Orbiter. It merges video created from the HRSC orographic surveys with the sonification of spectrographic data from Mars’ atmosphere (SPICAM) and ionosphere (MARSIS). It establishes a synesthetic creation in which instrumental music, electronics, and visuals play an equally important part. The resulting images are shown in pictorial quality, like enormous more than 25-meter high canvases, rendered more impressive by the fact that they are images in motion.

The different sections of the concert are connected by a markedly sound strategy. With their cell phones, members of the audience will create a kind of dynamic electronic massive chant, producing an interconnected sound and a visual structure connection between each multiple locations where the piece is being played around: the Guggenheim Museum Bilbao’s Atrium. This will be achieved using an app designed specifically for that purpose. *callingHiggs* is a piece for cell phones accompanied by electronic elements and video projections. This piece will be played by a large audience standing still in the Atrium. *callingHiggs* is the first piece of acousmatic music of its kind in the world—which had its premiere in 2013—revised especially for the Museum’s Anniversary.

After all that, a video link with the International Space Station will allow the audience to hear its crew wish the Museum a happy 20th Anniversary. The audiovisual material compiled during the video link with space will be used to create part of the last concert piece, *Valles Marineris*. The title refers to the largest canyon system on Mars. Therefore, the piece will also be the largest in terms of instrumentation and duration, with the members of the 100-saxophone orchestra distributed on every level of the Atrium.



## Sigma Project Quartet

saxophone quartet

**Summam indicabimus signo  $\Sigma$ .** *With such assertion, one of the most relevant mathematicians in history, Léonard Euler, used first time in 1755 the capital letter sigma (the eighteenth letter of the Greek alphabet) as an addition symbol. Since then, **Sigma** represents the summation of a finite or infinite series of elements.*

SIGMA Project—Andrés Gomis, Josetxo Silguero, Ángel Soria, Alberto Chaves—more than a saxophone quartet, is the materialization of a satisfied wish, an essential vehicle for instrumental music in the 21st century. If the string quartet was the par excellence instrument of classical music during last centuries, SIGMA Project vindicates in its current century the very same role for the saxophone quartet.

Along its vast career, SIGMA Project has performed more than 150 concerts in venues around the world: United States, Argentina (Teatro Colón), Mexico (Palacio de Bellas Artes), Chile, Germany, Scotland, France, Italy, Poland, Rumania, in festivals such as the Internacional Cervantino in Guanajuato, Hannöversche Gessellschaf für Neue Musik, Sala Gare du Nord in Basel, ENSEMS in Valencia, Quincena Musical of San Sebastián, Música(s) Contemporánea(s) del Teatro Central in Seville and multiple sessions in CNDM, Museo Nacional Centro de Arte Reina Sofía and Musicadhoy-Operadhoy of Madrid, among others.

Each member feels as an imaginative explorer, able to stimulate the composers so as to get interested by their sounds, generating new grammars in a sort of sonic laboratory, such as the projects developed with the composers, National Prize of Music' winners: Alberto Posadas (series *Poetics del Laberinto*), José María Sánchez-Verdú (series *KHÔRA*), José Manuel López López and Jesús Torres, or the thrilling collaboration with Félix Ibarrondo during its concert *Izarbil* for saxophone quartet and orchestra. This model has generated more than 40 premieres by renowned composers such as Ramón Lazkano,

Héctor Parra, Sergio Blardony, José Luis Torá, Alberto Bernal (Spain), Georgina Derberz, Javier Torres-Maldonado, Víctor Ibarra, Arturo Fuentes, Iván Naranjo (Mexico), Miguel Farías (Chile), Simone Movio (Italy), M<sup>a</sup> Eugenia Luc (Argentina), and Yair Klartag (Israel), as well as Spanish premieres by Sofiya Gubaidúlina, Salvatore Sciarrino, Peter Eötvös, George Friedrich Haas, and Hugues Dufourt.

The remarked modularity of SIGMA Project embraces from the formation homogeneity of four equal instruments to its maximum instrumental diversity, a quality really estimated within the current compositional tendencies. The world premiere of *Chaman* for four bass saxophones and electronics by Thierry Allá, the concert for four bass saxophones and symphonic orchestra *LaLibela* by Xavier Carbonell, or the series *KHÓRA* for two soprano saxophones and two bass saxophones by José María Sánchez Verdú, those are examples of this innovative concern attached to the group.

From their concerts, one realizes having attended a real sensorial experience, where sensations never perceived before, acoustic space, visual liturgy, and an authentic sound emerge. Likewise, such experiences could be enjoyed during the Spanish premiere of Salvatore Sciarrino's *La Bocca, I piedi, il Suono*, an emblematic piece for four solo saxophones and 100 saxophones in movement, and the performance at the frontis *Jostaldi* in Hondarribia (Gipuzkoa) of *Hormen Arteko Oihartzunak* by Gorka Alda, and original multimedia spectacle that merges the sounds produced by the *cesta punta* shots and the rhythmic view by *dantzaris* and the electronic mixed with the frontis acoustics and its echoes.

They develop the multidisciplinary work with another disciplines: video, dance, literature, theater, or painting are integrated in a natural way in their concerts, taking back music from past, establishing a utopian relationship. The premiere of the chamber opera *Songs of Innocence and Experience* for four saxophones and electronics by José Vicente Fuentes Castilla, the SIGMACIRCULO Festival promoted by SIGMA Project celebrated at the Círculo de Bellas Artes in Madrid, and the program devoted the Ars Subtilior and Ars Nova music are some examples of this direction.

As a recording label, SIGMA Project owes Sigmarecords, editing the CD *UTOPIÁS: New Music for Saxophone Quartet* and the DVD *La Música para Saxofón de Félix Ibarrodo*. Likewise, they have recorded for the Fundación BBVA (portrait-concerts by José Manuel López López and Gerardo Gombau), Orpheus Classical (portrait-concert María Eugenia Luc), Casa Velázquez-Académie de France in Madrid (portrait-concert Víctor Ibarra), and invited by the German institution Ernst Von Siemens Musikstiftung, by Col Legno label, a new portrait-concert by Simone Movio.

En 2017, SIGMA Project has presented five new world premieres by composers Alberto Posadas and Helga Arias (Spain), Hilda Paredes (Mexico), Simone Movio (Italy), and Roberto Sierra (Puerto Rico) during its tour around Santiago de Compostela, Madrid, Bilbao, San Sebastián, Badajoz, and Seville, as well as Buenos Aires (Teatro Colón and Auditorio CCK), Santiago de Chile (Auditorio GAM), Mexico DF (Museo Nacional de Arte and Colegio Nacional), and Kingston Theatre (Jamaica). SIGMA Project develops its activity thanks to the support of the Instituto Nacional de las Artes Escénicas y de la Música, the Instituto Etxepare of the Basque Government, and the Ernst Von Siemens Musikstiftung in Germany. SIGMA Project uses Selmer instruments, Vandoren accessories, and is technically assisted by Punto Rep.

[sigmaproject.es](http://sigmaproject.es)



## Het Nederlands Saxofoon Octet

saxophone ensemble

Founded in Amsterdam by saxophone player from Basque Country and Navarre David Cristóbal Litago, Het Nederlands Saxofoon Octet is a saxophone ensemble recently created, conformed by young voices tackling projects from very different focuses. The Schoenberg Foundation has granted this ensemble the transcription rights from one of the Arnold Schoenberg's repertoire keystone pieces, *Verklärte Nacht*. Likewise, Dutch composer Simeon te Holt's heir has permitted the realization of his famous piece *Canto Ostinato*.

This promising ensemble has performed at important festivals in Holland, such as Binnendieze Den Bosch, City Proms Leeuwarden and the Amsterdam Festival Canal, playing in prestigious Dutch venues and auditoriums, such as the Concertgebouw Amsterdam and the Van Gogh Museum, broadcast in several occasions by national Dutch media, such as Radio4.

[nederlandssaxofoonoctet.com](http://nederlandssaxofoonoctet.com)



## Íñigo Ibaibarriaga – Laboratorio Klem

saxophone solo and choreographer

Íñigo Ibaibarriaga is a consummate improviser and also a studio musician who follows many paths to reach the same end: the hybridization of his various musical influences into a poetic language. His work is focused to the promotion and study of contemporary music, especially that involving creative technologies.

He is European PhD by Basque Country University (UPV/EHU), writing a thesis entitled *Signo Musical y Gesto Instrumental. Límite y Periferia de la no representación*. Since 2016, Íñigo is Visiting Research Fellow at Huddersfield University (UK). He develops with the composer Carlos D. Perales the *Acoustbl* app, a tool for the interpretation of electronic music for performers.

Together with Julio d'Escriván, he plays in the FUSIL Ensemble and as such they have been invited to perform in recent years to the Art Bienal of São Paulo and separately to the University of São Paulo for the Seminário Ciência Música Tecnologia: Fronteiras e Rupturas. Responsible for the sound presentation of the exhibition *Percepciones en Transformación. Colección Panza* (Guggenheim Museum Bilbao), he has been invited to perform as far afield as the Kunitachi College of Tokyo, the CMMAS of Morelia, Mexico, The University of Lanús in Argentina and closer by, to the Huddersfield University Electric Spring and the Manchester University NOVARS, the Guggenheim Museum Bilbao, Cambridge University, Keele University, SARC (Belfast), Accademia di Santa Cecilia (Roma), etc. He has performed regularly at international festivals, since the early 1990s in Europe and north and South America.

He is author of *El Saxofón, Primeros Pasos* and *El Saxofón, Segundo Volumen* published by Real Musical – Madrid. Is the director of Laboratorio KLEM in Bilbao. He coordinates the project ZawpKlem for creative residencies in Bilbao, hosted by the Zorrotzaurre Art Work in Progress Foundation. He also coordinates the international project *Anatomy of Interpretation* with the Mexican Center for Music and Sonic Arts, CMMAS. He teaches saxophone, Improvisation at Jesús Guridi Conservatoire in the Basque Country.

[inigoibaibarriaga.com](http://inigoibaibarriaga.com)



## Matilda Hofman

first conductor

Matilda Hofman studied at Cambridge University, the Royal Academy of Music, and the Eastman School of Music, and also as a conducting fellow at the Aspen Music Festival and School. She has received awards from the League of American Orchestras, as well as the 2011 Thelma A. Robinson Award from the Conductors' Guild.

Matilda is Music Director of the Diablo Symphony in Walnut Creek, California, and conductor with Empyrean Ensemble, a contemporary ensemble-in-residence at the University of California at Davis, California, where she currently lives. She also works regularly with the San Francisco-based Left Coast Chamber Ensemble with whom she recorded for the Innova label in 2011, and recently premiered Kurt Rhode's chamber opera, *Death with Interruptions*. In 2014 she served as Music Director and conductor of Festival Opera's double bill *The Emperor of Atlantis* and *Another Sunrise*. Reviews described her conducting as "taut and finely controlled" (*San Francisco Gate*), and as giving "a striking sense of purpose" (*San Francisco Classical Voice*). Matilda has also worked at the Sacramento Opera, and has assisted Michael Morgan on several operas including *Pagliacci*, *Gianni Schicchi* and *Il Trovatore*. She has recently performed with the Fremont Symphony Orchestra and served as a guest conductor at the Sierra Summer Festival in Mammoth Lakes, and works at the San Francisco Ballet.

Matilda also conducts regularly in Europe and elsewhere. In 2011 she performed Luigi Nono's *Prometeo* at the Salzburg Festival and Berliner Festsspiele with Ensemble Modern, alongside Ingo Metzmacher. Subsequent performances have included the Holland Festival and the Tonhalle in Zurich, the 2015 Ruhrtriennale and the Paris Autumn Festival. Other recent guest conducting appearances include the Bochumer Symphoniker, SWR Sinfonie-Orchester Freiburg, Kammerakademie Potsdam in Germany and the Winnipeg Symphony Orchestra, Canada in their New Music Festival in a performance which was broadcast on CBC radio. Operas conducted in staged performances include *Così fan tutte*, *Le Nozze di Figaro*, *Turn of the Screw*, *Albert Herring*, *Carmen*, *Bluebeard's Castle*, and *Der Kaiser von Atlantis*, as well as new works.

Matilda is very committed to education and outreach and was Music Director of an outreach orchestra while a student at the Eastman School of Music. In this position she began a program to inner-city schools, which included concerts, mentorship, and support. As Music Director of the Diablo Symphony she is initiating an education program, which includes music in schools of the Contra Costa area and family concerts.

As part of her professional training Matilda has studied with Neil Varon, Martyn Brabbins, David Zinman, Kurt Masur, Sir Colin Davis, and Ingo Metzmacher, and has also conducted the BBC Philharmonic, Scottish Chamber Orchestra, Buffalo Philharmonic, Rochester Philharmonic, and London Symphony Orchestra among others.

[matildahofman.info](http://matildahofman.info)



## Maite Aurrekoetxea

second conductor

Maite Aurrekoetxea was born in Bilbao. She started her musical studies at the Conservatorio Juan Crisóstomo Arriaga in Bilbao, and in the Conservatorio Jesús Guridi in Vitoria-Gasteiz. She studied Composition with Carmelo Bernaola and Antonio Lauzurika, and electroacoustic music with Alfonso García de la Torre. Later on, she studied Orchestra Conducting at the Conservatorio Superior de Música in Madrid, with E. García Asensio and F. García Nieto. She attended conducting master classes by Juan José Mena, Johan Duijk, and Laszlo Heltay. As a regular student, she received conducting lessons by G. Gelmetti at the Academia Musicale Chigiana in Siena.

Maite has been conductor of the Zigor Choir in Barakaldo; assistant conductor at the Orchestra of the Conservatorio Jesús Guridi in Vitoria-Gasteiz; Conductor of the Symphony Orchestra of the Escuela de Música in Bergara; Conductor of the Euskal Kamerata Chamber Orchestra and guest conductor at the Banda Municipal de Música of Bilbao. Likewise, she has conducted the Oiasso Novis Ensemble. In 2005 she conducted an orchestra conformed by students from several conservatories from Basque Country. She has been invited to conduct the Bilbao Symphony Orchestra – BOS to perform chamber concerts, symphonic repertoire, and symphonic with choir repertoire.

As a composer, she has written several works for different instrumental sets and electroacoustic pieces: *Aparece* for trio of piano, clarinet, and cello; *La negra Ker* for clarinet quartet; *Voz* – electroacoustic piece; *eEstelae* for viola with effects; *Ki-Shar* for percussion and tape; *Besonders* for tenor sax, marimba and tape, among others.

In 1996, the BBK Foundation granted her with a one-year scholarship to support her studies in Composition, writing *Concierto para clarinete y orquesta*. Maite's pieces has been programmed in festivals Música Electroacústica de Vitoria, Festival Internacional de Música de Alicante, Muestra de Música Electroacústica de Cuenca, Festival Internacional de Música de Granada, as well as other countries, such as France, Belgium, United States and Japan. From 2003, Aurrokoetxea teaches Orchestra, and from July 2015 she is Director of the Conservatorio de Música Juan Crisóstomo Arriaga in Bilbao. Nowadays, she conducts the Vitoria-Gasteiz Orchestra, specialized in musical recordings for the audiovisual and film industry, and also the Espacio Sinkro Ensemble, specialized in contemporary music.



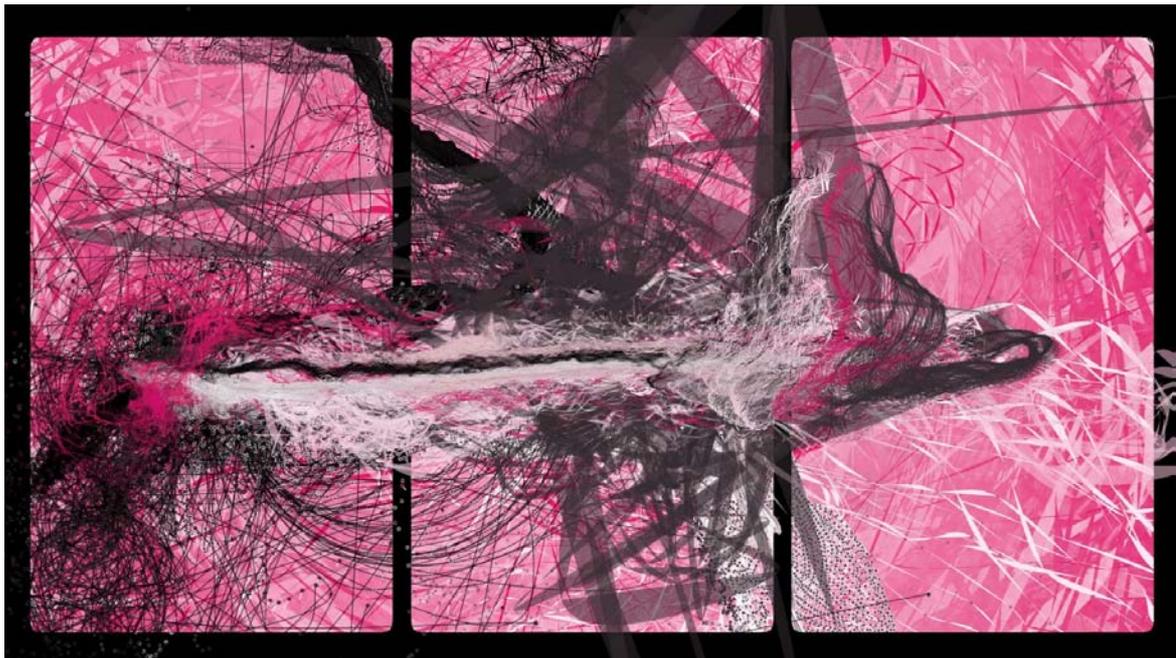
## Casper Schipper

electronic music composer

Casper Schipper is an electronic music composer born in 1984 in The Netherlands. He studied Sonology in the Royal Conservatoire in The Hague with Kees Tazelaar, Richard Barrett, Paul Berg, Joel Ryan and Justin Bennett. He earned a Bachelor in 2009 and a Master in 2011. His works have been performed in Gaudeamus Music Week, Amsterdam DNK, 2009 Shanghai International Electroacoustic Music Week and Studio Loos The Hague.

Casper has assisted the technical realization of many projects, as well as artists and collectives, among others: Willem Boogman, Rosehrte, Key of Life Festival Leiden, Maria Alejandra Castro Espejo, and VocaalLab. Casper is a systems technician of the Game of Life Foundation's WFS system. He also collaborates with Emmanuel Flores in the Monotone Studio collective, and in the GroundControl company as a sound engineer.

[casperschipper.nl](http://casperschipper.nl)



## Alba G. Corral

visual artist

Born in Madrid in 1977, Alba G. Corral is a visual artist and creative coder based in Barcelona. With a background in computer engineering, Corral has been creating generative art using software and coding for the past decade.

Her practice spans across live performance, video, digital media, and installation, exploring abstract narratives and expressing sensitivity and taste for color. By combining generative systems with improvised drawing techniques, her digital language becomes organic, creating mesmerizing digital landscapes.

Corral is known for her stunning live audio-visual performances where she integrates real-time coding and drawing in collaboration with musicians. Her works has been exhibited at festivals and events in Europe, México, Japan and EEUU.

[blog.albagcorral.com](http://blog.albagcorral.com)

## Juan Antonio Ros

sound engineer

Juanan Ros is an Electronic Sound Engineer studying at UPV, Sound Engineer and Musical Producer. He teaches at MUSIKENE (Conservatorio Superior de Música del País Vasco).

He possesses a wide experience in all environments related with sound engineering and sound recording (studio, TV, theater, live sound...)

During more than twenty years, Juanan has worked at several recording studios for many composers, artists, production firms and institutions.

The non-stop seeking of new limits on sound quality and technological innovation leads it to him to specialize in acoustic and orchestral music, dealing with new multichannel audio formats.

Juan is a specialist on the recording and production of film soundtracks, classical music, jazz, and contemporary music. He has recorded professionally relevant orchestras world-wide, such as SIF 309, London Session Orchestra and Moscow Symphony Orchestra, important ensembles such as Ensemble Recherche, Diotima Quartet, Sigma Project, Kuraia Ensemble and Emerson Quartet, working with renowned conductors such as Deyan Pavlov, Lutz Kohler, Juanjo Mena, Claudio Ianni, Enrique Garcia Asensio, and Arturo Tamayo.





## Ángel Arranz

composer and artistic director

Ángel Arranz [1976] is a composer, electronic music performer, and musicologist.

As a composer, his work centers on the development of modular structures, the exploration of intermediate domains between traditional instruments and electronics and sound spatialization. His music utilizes time as a constructional matter through applied mathematics, unifying the domains physical, structural, notational and DSP by means of organicism, morphology of natural forms, correlated spatiality and fractal geometry.

As a electronic music performer, he has played pieces by numerous composers through technical/artistic production at important venues, among others: Alberto Posadas, Kees Tazelaar, Richard Barrett, Jan Boerman, Dick Raaijmakers, Gottfried Michael Koenig, Babis Giannakopoulos, Johan Van Kreij, Juan José Eslava, Carlos Satué, Josué Moreno, Germán Alonso, Raquel García Tomás, Nuria Giménez Comas, Teresa Carrasco, Abel Paul, Siamak Anvari...

As a musicologist, he specialized with a PhD on the History of Electronic Music, examining space as a musical transversal concept, especially through the perspective of analog-acoustic historical electronic music to date and algorithmic/computer-assisted composition.

During his instrumental composition formation in Spain, he was a private student of Alberto Posadas. After earning with honors a Degree in Composition at the High Conservatory of Music of Salamanca studying with Alejandro Yagüe, from 2006 on he established his residency in The Netherlands, accomplishing *with distinction* in 2008 a Master in Sonology at the Royal Conservatory of The Hague. He received lessons from Paul Berg [algorithmic composition], Kees Tazelaar [voltage control techniques and analog studio], Johan van Kreij [Max/MSP], Paul Jeukendrup [sound engineering] and Richard Barrett [advanced composition]. Since 2017, Ángel Arranz is a PhD in Musicology at the University of Salamanca lecturing ad hoc, within the Institute of Sonology's framework, on the history of spatial music to nowadays, applied to instrumental composition and electronic music through technology.

Ángel has developed an innovative non-harmonic compositional system denominated *Sinusoidal Deconstruction*, whose efficacy is comparable to the diverse worldwide classical systems. The system joins and combines various instrumental parts into an organic whole composition, whatever the number and configuration of its parts. Subsequent interdisciplinary investigations on the relationship between music and architecture have oriented him to create various series of compositions (*DK <protos>*, *DK <qumran>*, *[d]espacio*) inspired by/based on/worked within avant-garde buildings, designed by bureaus such as Richard Rogers Partnership, Gehry Partners LLP, and KonkritBlu Arquitectura, among others.

In 2012 his 8-channel work *Extrusion* was selected to represent the Spanish UNESCO Federation in China at the Musicacoustica Festival in Beijing. In 2013, the prestigious *musicadhoy-operadhoy* dedicated a full portrait concert in Madrid. He realized two pieces to celebrate 1000 Years of the Foundation of Peñafiel [1013–2013]: *Toposonia*, a massive sound intervention that uses the whole urban layout of Peñafiel, and *DK <protos>* a series of three compositions inspired by the building of Bodegas Protos.

His pieces have been programmed at important festivals and venues in The Netherlands, Italy, Portugal, Switzerland, Germany, Mexico, South Korea, China, and Spain. He has realized commissions among others from Fundación BBVA Madrid, Guggenheim Museum Bilbao, Festival Musicadhoy, Bodegas Protos, Ensemble Modelo 62, Smash Ensemble; Josetxo Silguero, Ralph-Raimund Krause, Raphaël Simon, José María Santandreu; City Hall of Peñafiel, Joven Orquesta de la Universidad de Valladolid [JOUVA]; playing at venues and festival such as Discussion Concert Series – Institute of Sonology The Hague, DNK - Smart Project Space, Incubate Tilburg; Symposium Music Spaces The Hague; TodaysArt The Hague [NL]; Fernost – Ferwest München [DE]; Chaotic Moebius Basel [CH]; Synthese Festival Guarda [PT]; Università degli Studi di Salerno [IT]; Guggenheim Museum Bilbao, Fundación Phonos, Festival Sonar MACBA Barcelona, Festival AMEE de Valencia, Festival Synchresis – Valencia, Festival de Primavera USAL, Quincena Musical de San Sebastián, Festival SON – musicadhoy, Festival Peñafiel Milenio 2013, MUSAC León, Mostra Sonora de Sueca, Valencia [ES]; Busan International Electronic Music Festival [KR], Musicacoustica Beijing [CHN].

He has actively collaborated as a journalist with several specialized magazines, such as *Sonograma*, *Sul Ponticello*, and *Espacio Sonoro*. He regularly lectures on new music and contemporary creation. His complete oeuvre to date is published by Donemus Publishing.

Ángel has been invited to give lessons and master classes at Institute of Sonology The Hague, University of Salamanca, University of Valladolid, Conservatory of Utiel and Mostra Sonora Sueca – Valencia.

Ángel Arranz is the Artistic Director of The DK <projection>, an independent multi[inter]disciplinary collective founded by him in 2009 in one of the world's most vibrant hubs of classic electronic music and media art: the Institute of Sonology in The Hague, Netherlands.

The DK <projection> is conformed by international members, whose creative stimulus is the use of technology as a vehicle of musical and artistic transformation. The company has realized artistic productions for many important European venues and festivals.

[angelarranz.com](http://angelarranz.com)



## José López-Montes

composer and visual artist

López-Montes's music focuses on acoustic, spectral, and harmonic exploration, algorithmic processes and synaesthesia. His creations combine video synthesis, sonic spatialization techniques, and programming of computer-assisted composition tools, joining elements such as cellular automata, genetic algorithms, generative grammars, or data sonification.

In 1999 he founded along with Pablo Heras-Casado a group devoted to the experimentation and performance of contemporary music, which premiered his ballet *La mitad de la verdad está en los ojos*, Prize for the Best Original Music of the Theater Festival Palma del Río 2000.

After completing his composition studies in Granada with Francisco González Pastor, he moved to the Hochschule Musik und Theater Zürich to study with Michael Jarrell and Gerald Bennett, who introduced him to sound synthesis. His first acousmatic production was awarded at the II International Prize SGAE of Electroacoustic Music.

López-Montes began to integrate visual counterpoints in his works with *Le Ton-beau de Frank*, for Farblichtflügel, ensemble and video, a work awarded by the conservatories of Zurich and Berlin. *Último estudio para Átanos*, for ambisonic tape and video won the Bourges IMEB Festival multimedia prize. In 2009 he was resident composer at the ICST Institute for Computer Music and Sound Technology at Zurich University of the Arts, where he completed the project *Badlands to the Skies*, for viola, voice, ambisonic tape, and panoramic multiprojection, in collaboration with Charlotte Hug, which premiered with great success at the Museum für Gestaltung Zürich. His visual music has been documented in many books and studies.

In parallel to his compositional work, he appears regularly as a solo pianist. Since 2010, López-Montes composes, adapts and plays along with the visual theater company La Maquiné, performing at Kursaal, Caixaforum, Teatro Real in Madrid or the Gran Teatre del Liceo in Barcelona, among many others, reaching more than 300 performances around four continents. Their play *The Forest of Grimm* received the Max Prize for the best children show, among other awards. In these works he has successfully integrated the contemporary language in the context of family theater, using extended techniques for piano and electronics.

Since 2005 he has been professor of Improvisation, Harmony, Sonology, and Mathematics at the Conservatory of Granada. He has offered courses and lectures at Hochschule Musik und Theater Zürich, State University of Londrina (Brazil), Reina Sofía Art Center Museum in Madrid, University of Daegu (South Korea), Staatsoper of Stuttgart, etc.

López-Montes is currently researching at the School of Informatics and Telecommunications Engineering (University of Granada) the development and the generalization of artificial intelligence techniques applied to musical composition, continuing his master thesis *GenoMus: Prospection of techniques for computer assisted creativity through metaprogramming of musical genotypes*.

**lopezmontes.es**



## The DK <projection>

Founded by Ángel Arranz in 2009 at one of the world's most vibrant hubs of classic electronic music and media art, the Institute of Sonology in The Hague, The DK <projection> is an independent multi[inter]disciplinary group whose creative stimulus is the use of technology as an agent of musical and artistic transformation.

With a special emphasis on building performative bridges between music and new avant-garde architecture, The DK <projection> explores many other multimedia expressions within an organic whole, reinventing music genres that play a role in the visual arts, applied technology, and sound spatialization, such as algorithmic composition, fixed-medium and live electronic music, live video performance, video installation, sound installation, photography, contemporary dance, and documentary film.

Thanks to its versatility, The DK <projection> is able to work with all kinds of staging requirements and spaces, such as contemporary or electronic music festivals, film festivals, contemporary art centers, cultural centers, media labs, industrial premises, experimental jazz, dance programs, and theater events.

**[thedkprojection.com](http://thedkprojection.com)**

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