

“ZERO” – THE MUSIC OF LEONARDO THE SPACE PIANIST WILL BE BACK TO THE INTERNATIONAL SPACE STATION RIDING A SPACEX ROCKET



‘ZERO’

Artwork by Anna Utopia Giordano

The space music composition “ZERO” by pianist and aerospace engineer Leonardo Barilaro is flying to the International Space Station with the mission Maleth 3, after the successful NASA launch from Cape Canaveral on 14th March 2023 (15th March at 1.20 am in Malta), onboard SpaceX CRS27 rocket launch. The music is stored on the mission computer, integrated into an ICE Cubes platform and once it arrives on board the International Space Station, it will stay in Space for a total of 60 days. The music will be accessed from the mission control room in Malta and broadcasted from Space in a special planned event.

This is the second time that the music of the Space Pianist is reaching orbit around Earth.

The title of the creation, “ZERO”, has a multilayered meaning. Its figure stands for nought in the Arabic notation and was called *sifr*, Cypher, which means "Nothing". The word came to Europe along with the Arabic numeral system. As early codes substituted numerals for letters to hide the word’s meaning, codes became known as *cyphers*. If you crack a cypher, you break the code and you can understand the message.

Zero is also the absence of all quantity considered as quantity, it is the making of Something out of Nothing and this revolutionized not only math but also human society.

“ZERO” is the evolution of the previous space music composition that was onboard the International Space Station, i.e. “Maleth”, where the Astronaut was leaving Earth, our Safe Harbour, to pass through another dimension. In this new composition for piano and synth, the travel leads the Astronaut to discover himself reflected into the Universe, while the Universe is reflected into him in a waterfall of harmonies and cosmic wind of notes.

This concept is mirrored in the artwork of ZERO, a unique creation by polymath artist Anna Utopia Giordano. She created a hybrid image which combines cutting-edge digital art and postproduction with A.I. (artificial intelligence) text-to-image generation tools that employ machine learning algorithms. The genesis of the artwork has its roots in the conceptual and philosophical concept of zero, conceived in the Indian tradition as empty (*sūnya*) but also as Space and Sky (*kha*, *vyoman*, *gagana*, *ambara*). This constitutes an oxymoron, in which the pole pairs intersect, establishing a relationship between the micro and the macrocosm.

The music has been recorded at Piano's Maene in Bruxelles (Belgium), official Steinway&Sons dealer, that thanks to Mr Vincent Lignier, sponsored the music project making available the concert hall and preparing for the occasion a mind-blowing Steinway model D. The piece has been mastered by sound engineer Paolo Bernardini of Medialica Studio (Italy).

Dr Leonardo Barilaro, who is also Senior Lecturer in Aerospace Engineering at the Malta College of Arts, Science and Technology (MCAST), joined forces with Professor Joseph Borg of the University of Malta, leader of SpaceOmix and P.I. of project Maleth 3, a space bioscience experiment to study the microgravity effects on microbiome studies of diabetic patients. Dr Leonardo Barilaro, besides the artistic contribution to the mission, is the scientific point of contact and initiator of the collaboration on the MCAST side and took also part in the payload tests carried out at Space Application Services (Belgium), together with Prof Borg's Team. The primary scope of the research mission is to target and study human skin samples in space, planning future missions to deeper space such as Moon and Mars. "ZERO" will also be performed next 23rd March for the guests of a very exclusive event, "Bandiera Madre", organized by the Italian Embassy in Valletta.

The space music composition and its videoclip will be available on Spotify and all main music digital platforms at the beginning of April.

Leonardo Barilaro not only was the first musician to premiere a new composition streaming it from Space to Earth, but during 2022 was also the first artist in the world to release 365 singles every single day, together with 365 videoclips of the music tracks on YouTube. To seal the closing of his gigantic project "Space Piano Music Everyday", Leonardo Barilaro published the last single of the cycle, '365 Days of Entropy'.

Leonardo shares with people a Dream, where the impossible becomes possible. And what was science-fiction in the past now is a reality. The idea of Art in Space is something being more and more explored, for the example by the University of Padova ("Moon gallery") or by EuroSpaceHub (space innovation ecosystems), with a huge potential of bringing people closer to the concepts of this new Space Era that humankind is experiencing. As a pianist and aerospace engineer Leonardo is proudly part of the pioneers pushing these new boundaries.

As next step, the Space Pianist is aiming at performing his music while in orbit around our planet Earth.

Stay tuned in the next days for updates about the broadcasting of ZERO from Space!

- *Leonardo the Space Pianist Website:* www.nullodiesinenota.com
- *Maleth 3 OVERVIEW:* <https://mcast.edu.mt/maleth%203/>
- *Instagram:* <https://www.instagram.com/thespacepianist>
- *YouTube:* <https://www.youtube.com/Nullodiesinenota>
- *Spotify:* <https://open.spotify.com/artist/1l4Og7vLHYtJswcyl3P0Li?si=WwgfMbJxQOogF4tf3fJXbg>
- *Anna Utopia Giordano:* <http://www.annautopiagiordano.it>
- *SpaceOMIX:* <https://www.spaceomix.com/>
- *SpaceX CRS-27 launch:* <https://www.youtube.com/live/HcTqj30dJYM?feature=share>
- *Piano's Maene:* <https://www.maene.be/>
- *Medialica studio:* <https://www.medialica.com/>



Leonardo the Space Pianist during the recording session of ZERO for Maeth 3 at Piano's Maene in Bruxelles



Leonardo the Space Pianist at Space Application Services for the payload integration tests for Maeth 3