

# QUBIT



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**RICCARDO PES**

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IRENE MUSIC LABEL

RECITAL FOR CELLO, LOOP-STATION  
AND ELECTRONICS

MUSIC  
& PHYSICS

2023 // RICCARDO PES cellist and composer



QUBIT, Music and Physics // The album is inspired by physics and astrophysics, and the title, "QUBIT," comes from quantum bits. The quantum is a smaller particle than an atom and will be the basis for future quantum computers.

This work explores how Physics and Technology can influence Music.

The compositions are intended as a journey: from the beginning of the Universe, describing the subatomic particles, to the space expeditions. The music takes inspiration from the sounds of different planets, recorded by NASA, and uses modern technologies such as the loop-station.

*tracks list*

1. ATOMOS
2. HIGGS BOSON
3. SILENZIO COSMICO
4. DARK MATTER
5. THE RESONANCE
6. QUBIT
7. BACH #1
8. PLANETS
9. SUPERMOON
10. SHOOTING STAR
11. VOYAGER CAVATINA



[PREVIEW HERE](#)



**Giovanni Sollima, cellist and composer**

Riccardo is always a great surprise! Both his composition and his playing are surprising! He is a tireless researcher led by the energy he feels around him. In Riccardo's work; is it a Suite? an Album? a Short story? a journey? I would say it is a bit of all these things together. In his work I find the true meaning of making music, the one that also lives in jazz, rock or pop musicians. His music is far from the standard models, this is something that means a lot to me, in a heartfelt way. I believe this is a way to make music that we should re-embrace. Riccardo's music is lunar, introspective. I had already noticed this unusual quality in his earlier work. His passion is really genuine. I could keep talking about his work, analyzing it track by track but I would spoil what must be a surprise! Enjoy the listening!!

**Fabrizio Cocetti, Director of Technology at the Enrico Fermi Study and Research Center (CREF)**

The new album by Riccardo Pes struck me from start to finish. From the first track, I felt as if I was drawn into a creative dimension where Art and Science are profoundly connected; in a way that makes it accessible and enjoyable to the listeners. In this work, Riccardo is both the composer and performer in which he explores a new language of music which introduces us to the mysteries of the Universe.

QUBIT begins by describing the subatomic particles and concludes with a dream of travelling through Space. The tracks are composed using a strong classical music structure combined with an experimental/electronic contemporary approach. Riccardo's method of research is quite similar to that of a scientist: the principle of scientific discovery is to start from what is known, and then to allow intuition to continue. Listening to Riccardo's music is a profoundly emotional experience. This original album combines his great soul with the depth of his research and gives us the key to accessing scientific knowledge in a unique way.

the mystery  
OF THE COSMOS

**Paola Dalle Molle, Messaggero Veneto**

"A sound exploration throughout 11 tracks. In this record the Stars are not only considered as part of scientific-mathematical studyings but also as a symbol, an allegory of something greater. The music describes the fascination towards the unknown and the mysteries of the Cosmos"



## QUBIT: The Cello Meets Astrophysics

An interview with Riccardo Pes

### Love at First Listen

"I first encountered Italian cellist-composer Riccardo Pes when searching for unaccompanied works for the cello in early 2020. It was love at first listen for me when I found his transcription of Bepi De Marzi's *Signore delle Cime*."



"I am thrilled to find beautifully idiomatic writing for the cello and I wanted to learn more about Riccardo and his work. In visiting his website, I discovered that he composes as well as transcribes music, and his pieces reflect his interdisciplinary intellectual interests."

**Brenda Neece, Cello Museum founder and curator**



[FULL INTERVIEW HERE](#)





## RICCARDO PES

Riccardo Pes is an Italian cellist and composer graduated with outstanding from the Royal College of Music, London on the Artist Diploma course, under the tuition of the distinguished professor Melissa Phelps. His repertoire spans from the baroque, played on period instruments, to the contemporary. Riccardo also dedicates time to research lesser-known compositions, as well as new works. His curiosity has led him to experiment with various sources of technology, such as the loop-station, and he is committed to finding new ways to bring classical music to younger generations.

As a soloist, Riccardo has played the Schumann Cello Concerto with the Richmond Symphony Orchestra, Tartini's Cello Concerto in A major with I Solisti Veneti conducted by Claudio Scimone, the Cello Concertos by Nicola Fiorenza and Nicola Porpora with the Marchigiana Philharmonic Orchestra conducted by Marco Feruglio, and the Vivaldi Concerto for two cellos with the Accademia d'Archi Arrigoni conducted by Domenico Mason.

He has played numerous solo recitals in prestigious venues, such as the Elgar Room at the Royal Albert Hall, Kings Place, The Queen Elizabeth Hall at the Southbank Centre, Blackheath Halls, Royal Academy of Arts, Schloss Laudon in Vienna, Sala Sinopoli in Rome, Teatro Della Tosse in Genoa. He has been invited to perform at important festivals such as the Venice Biennale, "AHA! Festival " in Gothenburg, Triennale of Milan, The Sounds of the Dolomites.

Riccardo has studied composition and counterpoint with the composers Battista Pradal and Mario Pagotto. His music is published by the Sonzogno Music Publisher in Milan and has been performed at venues including the Southbank Centre London during the festival "Nordic Matters", the "Summer Exhibition" at the Royal Academy of Arts, Venice Biennale, Triennale of Milan, and Teatro Valle in Rome.



A portrait of Fabrizio Coccetti, a man with short, wavy grey hair, wearing glasses and a dark jacket, smiling slightly. The background is dark with a blue gradient on the right side.

## FABRIZIO COCCETTI

Fabrizio Coccetti is a Physicist, Researcher and Director of Technology at Centro Ricerche Enrico Fermi – Museo Storico della Fisica e Centro Studi e Ricerche "Enrico Fermi" (CREF) in Via Panisperna, Rome.

He worked at SLAC (Stanford University, with a grant from US-DoE) and later at CERN (2009-2012) in the ALICE experiment. He is an expert of Monte Carlo Simulations, Complex Networks and Big Data Analysis. He was visiting professor at IMT Alti Studi of Lucca (2014) to develop "Analysis of Big Data using methods of statistical physics, Agent Based Modelling and Algorithms of Complex Networks".

He was member of the group of researchers which established the Internet2 Land Speed Record (listed in the Guinness Book of World Records 2004).

In his career, he published 100 papers in peer-reviewed journals, collecting more than 10000 citations (source Google Scholar), h-index 40.

He was the Run Coordinator of the Extreme Energy Events experiment (EEE), and in charge of the Monte Carlo simulations of Cosmic Extensive Air Showers.

He studied the optimization of solar cells and, in 2016 and 2017, he was the Italian coordinator of the Progetto di Grande Rilevanza, bilateral collaboration with South Africa, "Plasmonics for a better efficiency of solar cells" funded by MAECI.

Personal web page: <http://www.fc8.net>

