GRAN SASSO hands-on 2025

Laboratori Nazionali del Gran Sasso (INFN)
Università degli studi dell'Aquila
Gran Sasso Science Institute

PUBLIC LECTURE

From Pythagoras to antimatter

In this discussion, we will argue how certain lines of thought that emerged in ancient Greece have evolved and refined over time, influencing significant developments in science to this day. In particular, we will demonstrate how the concept of antimatter — seemingly a wholly modern idea — took shape and matured with the help of these ancient insights.

Plan of the presentation:
1. Repetitive Phenomena and Waves (Pythagoras, Philolalaus, Hippasus, etc.)
2. Commentary on Physics and Metaphysics (Descartes, Gamow and others)
3. The Greek Theory of Sound (Archelaus and Chrysippus)
4. Connection between Light and Sound (from Huygens to Maxwell, from the Atomists to Einstein)
5. The Wave Theory of Matter (from de Broglie to Schroedinger)
6. The Discovery of Antimatter (from Dirac to Anderson)
7. The Wave Point of View Emerges (Pauli Weisskopf, Majorana, Stueckelberg)
8. A Modern Argument (Feynman)

N.B.: The oral presentation will be in English,
the slides are in Italian.

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Wednesday,
17 September 2025
at 6pm

Centro congressi
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