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Feynman's Frameworks on the Nanotechnology in a Current Historiographical Debate

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The nanostructures research has been exploring new modelling and techniques in the fields of Sciences and Applied Sciences & Technology. Outstanding results have been enriching the scientific knowledge from Physics to Biology, from Engineering to Medicine continuously achieving new milestones. In the end 1959, Richard Phillips Feynman (1918–1988) gave a talk to the American Physical Society in Pasadena, which explored the immense possibilities afforded by miniaturization research. This talk was transcribed in famous “There’s Plenty of Room at the Bottom” (1964, March 13th). It appears to be, according to the current historiographical—and scientific narrative, the inspiring cornerstone for scientists in Nanotechnology research. Self-assembling machines, atom manipulation, nano-carriers in medicine, new materials like graphene and fullerene, innovations in electronic microscopy are just a few of the new discoveries whose origins are commonly said to lie on Feynman’s work. In the following decades, Feynman’s heritage has been. The argument on “Plenty of Room”’s framework opened new historiographical debate: Is Feynman’s framework the inspiring source for nano research? In literature, interesting examples of different points of view about this work can be found in several sources. As part of my current doctoral research at Lille University (supervised by prof. Raffaele Pisano), our talk aims at discuss the influence of the Feynman’s “There’s Plenty of Room at the Bottom” on the theoretical and experimental developments of nanotechnology, including the epistemic and controversial historiographical debates on the subject.

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