

Fermi, Majorana and the First Developments of the New Quantum Theory in Italy

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The introduction of the novel quantum theory in Italy was mainly due to the work of Enrico Fermi, and the Roman school that developed around him between the end of the 1920s and the 1930s produced remarkable results both on the experimental and theoretical side. Especially Fermi and his former “student” Ettore Majorana contributed significantly to showing how the newly born quantum mechanics could be successfully applied in atomic, molecular and nuclear physics. Furthermore, they were able to introduce new concepts and new theories (or even just strengthen and clarify some of them, already introduced) that still represent milestones in the development of the quantum theory. In the present talk, just these contributions will be briefly discussed, revealing how fundamental results emerged in Italy during the 1930s both in the general quantum theory and its applications.

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