

CHAPTER OVERVIEW

7: Symmetries, Invariance and the Hamiltonian

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Thumbnail: Amalie Emmy Noether was a German mathematician known for her landmark contributions to abstract algebra and theoretical physics. She invariably used the name "Emmy Noether" in her life and publications. She was described by Pavel Alexandrov, Albert Einstein, Jean Dieudonné, Hermann Weyl, and Norbert Wiener as the most important woman in the history of mathematics. As one of the leading mathematicians of her time, she developed the theories of rings, fields, and algebras. In physics, Noether's theorem explains the connection between symmetry and conservation laws.

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