Contribution ID: **46**   Type: **not specified**

Bootstrapping Quantum Mechanics

Wednesday 6 December 2023 17:10 (5 minutes)

Bootstrapping is an emerging numerical method that is used to calculate the eigenvalue of the Hamiltonian for some non-relativistic Quantum systems. The approach consist on using the hermitian property of the hamiltonian and the other operators to select the correct values of the energy of the system. We will show a basic introduction to this method, and applied it in the hydrogen atom and the harmonic oscillator.

Authors: Mr SALGADO, Juan Diego (Universidad Nacional de Colombia);   Ms LONDOÑO, Sofía (Universidad Nacional de Colombia)

Co-author: RODRIGUEZ, Jairo Alexis (Universidad Nacional de Colombia)

Presenters: Mr SALGADO, Juan Diego (Universidad Nacional de Colombia);   Ms LONDOÑO, Sofía (Universidad Nacional de Colombia)