

Abstract Submitted
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Franck-Hertz Classic Experiment Automatization for the Modern Physics Laboratory MIGUEL BENCOMO, RODRIGO GAMBOA-GOÑI¹, MIGUEL CASTRO-COLIN, Department of Physics, UT El Paso, El Paso TX 79968 — We will present a setup of the classic experiment developed by James Franck and Gustav Hertz using the software LabView. As in the classic experiment a cathode is heated producing electrons which are accelerated by an accelerating voltage, instead of the Mercury vapor used by Franck and Hertz we will deal with Neon. We will look at the spectral response of the Neon as a function of filament current in the electron gun. The automatization of the experiment will allow the users to explore details of the experiment that otherwise are easily hidden by technical complications that arise during experimentation.

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