

Abstract Submitted  
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**Atonic Mechanics Calculations of He II Lines of R. L. Kelly** ALFRED PHILLIPS, JR., Source Institute — We have calculated the energy levels for the many spectral lines of He II for the unpublished data of R. L. Kelly. The 243 lines of data are given on the [NIST Atomic Database Levels Data](#) web page with the proviso “not evaluated by NIST.” The data and calculations usually agree exactly. Discrepancies between measurements and calculations are found only when the electron is very close to the nucleus. The calculations were made using Atonic mechanics which provides of doing atomic mechanics without recourse to wave notions.

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