

Abstract Submitted  
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**Photoionization of PII<sup>1</sup>** SULTANA NAHAR, The Ohio State University, E. HERNÁNDEZ, Universidad Autónoma del Estado de Morelos, L. HERNÁNDEZ, A. ANTILLÓN, A. MORALES, Universidad Nacional Autónoma de México, O. GONZÁLEZ, University of Groningen, 9747 AA Groningen, The Netherlands, D. MACALUSO, Montana State University, D. HANSTORP, University of Gothenburg, A. CONVINGTON, K. CHARTKUNCHAND, University of Nevada Reno, A. AGUILAR, The ALS, Lawrence Berkeley National Laboratory, A. JUÁREZ, G. HINOJOSA, Universidad Nacional Autónoma de México — The cross section and spectrum of single photoionization of phosphorus cation was measured in the energy range from threshold to 50 eV with a photon energy resolution of 40 meV. A close coupling R-matrix calculation is compared to the experimental data. The spectrum is composed of a non resonant cross section over which resonant structure consisting of several Rydberg series is superimposed. The spectrum shows evidence of electronic excitation in the initial PII ion and strong interaction between nonresonant cross section and resonant structure. Montana Space Grant Consortium, Swedish Research Council, CONACYT CB-2011 167631-

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