

## ATOMIC STRUCTURE OF THE CARBON LIKE ION Ca XV

N. Alwadie<sup>1,2</sup>, A. Almodlej<sup>1</sup>, N. Ben Nessib<sup>1,3</sup> and M. S. Dimitrijević<sup>4,5</sup>

<sup>1</sup>*Department of Physics and Astronomy, College of Sciences, King Saud University, Saudi Arabia*

<sup>2</sup>*Department of Physics, College of Sciences, King Khalid University, Saudi Arabia*

<sup>3</sup>*GRePAA, INSAT, Centre Urbain Nord, University of Carthage, Tunis, Tunisia*

<sup>4</sup>*Astronomical Observatory, Volgina 7, 11060 Belgrade 38, Serbia*

<sup>5</sup>*Sorbonne Université, Observatoire de Paris, Université PSL, CNRS, LERMA, F-92190 Meudon, France*

*E-mail: Nalwadee@kku.edu.sa, amodlej@ksu.edu.sa, nbennessib@ksu.edu.sa, mdimitrijevic@aob.rs*

Energy levels, oscillator strengths and transition probabilities for the multicharged carbon like Ca XV ion have been calculated using the pseudo-relativistic Hartree-Fock (HFR) approach using the new Cowan atomic structure code 2018. Results have been compared with NIST database and other calculated data.