

OCT 4 1965

" THE MEASUREMENT OF SPECTRAL LINE SHIFTS AS A FUNCTION  
OF TEMPERATURE AND ITS CONTRIBUTION TO THE STUDY  
OF INTERATOMIC INTERACTIONS CONSIDERED  
WITHIN THE FRAMEWORK OF IMPACT THEORY

by

R. GRANIER

(Laboratoire des Hautes Pressions, C. N. R. S. -BELLEVUE, France)

-----

The present work deals with the absorption spectra of resonance line shifts due to the action of perturbing atoms. We present some experimental results which show the effect of mass and temperature. In particular, the study of the temperature effect allows one to discuss certain theoretical terms and can lead the evaluation of the impact diameter.

Finally, for the Rb-Ne couple, we suggest a few plausible values of interaction potentials in the ground and excited states. These results, relating to interatomic interactions considered within the framework of an impact theory, could be stated more precisely and completed if a statistical theory, applicable at high densities, were available.

-----