

HP1 A comprehensive study of the supergiant Rigel (B8 Iae:)

B. Albayrak¹, S. J. Adelman², J. P. Aufdenberg³, A. F. Gulliver⁴ and O. I. Pintado⁵

¹ *Ankara University, Faculty of Science, Department. of Astronomy & Space Sciences, 06100, Tandoğan, Ankara, Turkey*

² *Department of Physics, The Citadel, 171 Moultrie Street, Charleston, SC 29409, USA*

³ *National Optical Astronomical Observatory, 950 N. Cherry Street, P. O. Box 26732, Tuscon, AZ 85726, USA*

⁴ *Department of Physics and Astronomy, Brandon University, Brandon, MB, R7A 6A9, Canada*

⁵ *Departamento de Física, Facultad de Ciencias Exactas y Tecnología, Universidad Nacional de Tucumán, Av. Independencia 1800, 4000 San Miguel de Tucumán, Argentina*

We have begun a detailed spectral analysis of the bright supergiant Rigel. Our spectra are being obtained with CCD detectors using the long camera of the 1.22-m telescope of the Dominion Astrophysical Observatory and the EBASIM spectrograph of the 2.1-m telescope at CASLEO. We plan to obtain spectra with $S/N \geq 1000$ over the entire accessible optical window. We show some preliminary results based on those spectra that we have measured. We are now employing LTE techniques, but later we plan to incorporate non-LTE calculations. This is a companion to Albayrak's Thesis study of Deneb (A2 Iae).
