RAMAN MAPPING OF PDRS

WILLIAM J. HENNEY

Instituto de Radioastronomía y Astrofísica, Universidad Nacional Autónoma de México, Apartado Postal 3-72, 58090 Morelia, Michaoacán, Mexico; w.henney@crya.unam.mx

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Abstract

I show that the broad Raman-scattered wings of $H\alpha$ can be used to map neutral gas illuminated by high-mass stars in star forming regions. Absorption features in the pseudo-continuum at 6634 and 6663 Å correspond to neutral oxygen far-ultraviolet absorption lines at 1027.43 and 1028.16 Å.

1. INTRODUCTION

Dopita et al. (2016) were the first to identify Raman scattering in the Orion Nebula.

2. OBSERVATIONS

3. DISCUSSION

The effective resolving power of the optical spectrograph is multiplied by 6.4 for the FUV domain.

REFERENCES

Dopita, M. A., Nicholls, D. C., Sutherland , R. S., Kewley, L. J., & Groves, B. A. 2016, ApJ, 824, L13