The AGN Properties of the Starburst Galaxy NGC 7582

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NGC 7582 was identified as a starburst galaxy in the optical (Veron *et al.* 1981) but its X-ray emission is typical of a Seyfert 1 galaxy (Ward *et al.* 1978). We analyzed a datacube on this object obtained with the GMOS-IFU on the Gemini-South telescope. After a subtraction of the stellar component using the STARLIGHT code (Cid Fernandes *et al.* 2005), we looked for optical signatures of the AGN. We detected a broad $H\alpha$ component (Figure 1) in the source where Bianchi *et al.* (2007) identified the AGN in an *HST* optical image. We also found a broad $H\beta$ feature (Figure 2), but its emission reveals a extended source. We suggest that it is the light of the AGN scattered in the ionization cone. We propose that NGC 7582 is a Seyfert 1 galaxy. A number of other "hot-spots" and Wolf–Rayet features were also identified.
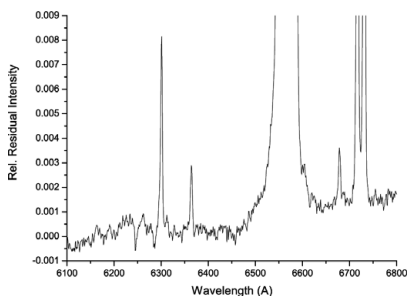

Figure 1. Spectra extracted from the region of the AGN.
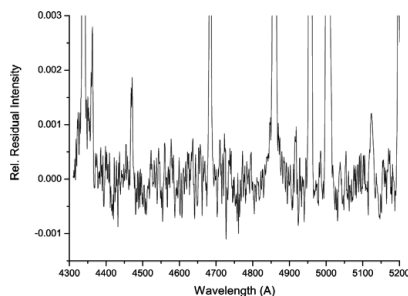

Figure 2. Spectra extracted from the region of the ionization cone.

References

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