

SDSS 0956+5128: A Broad-line Quasar with Extreme Velocity Offsets

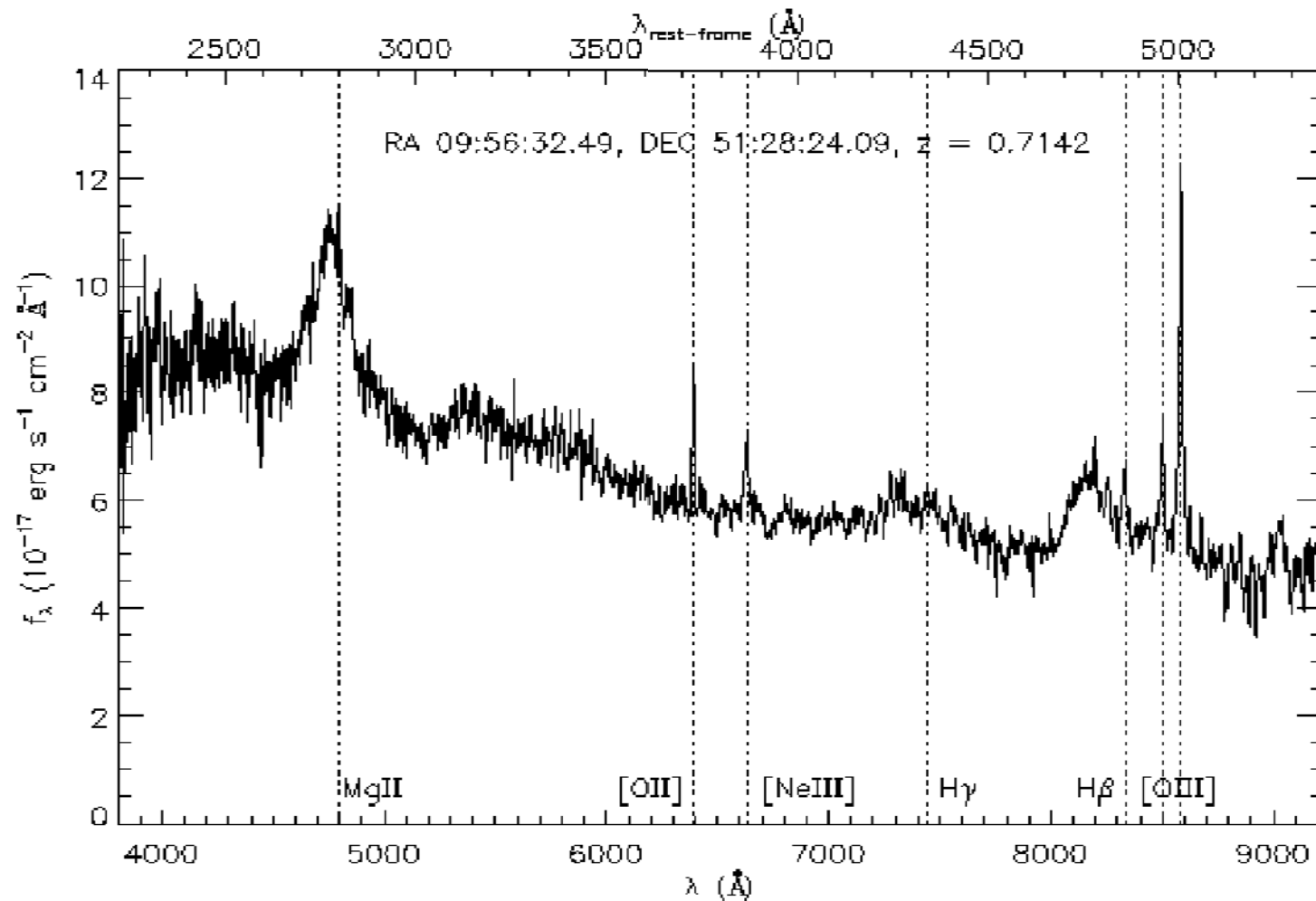
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Collaborators:

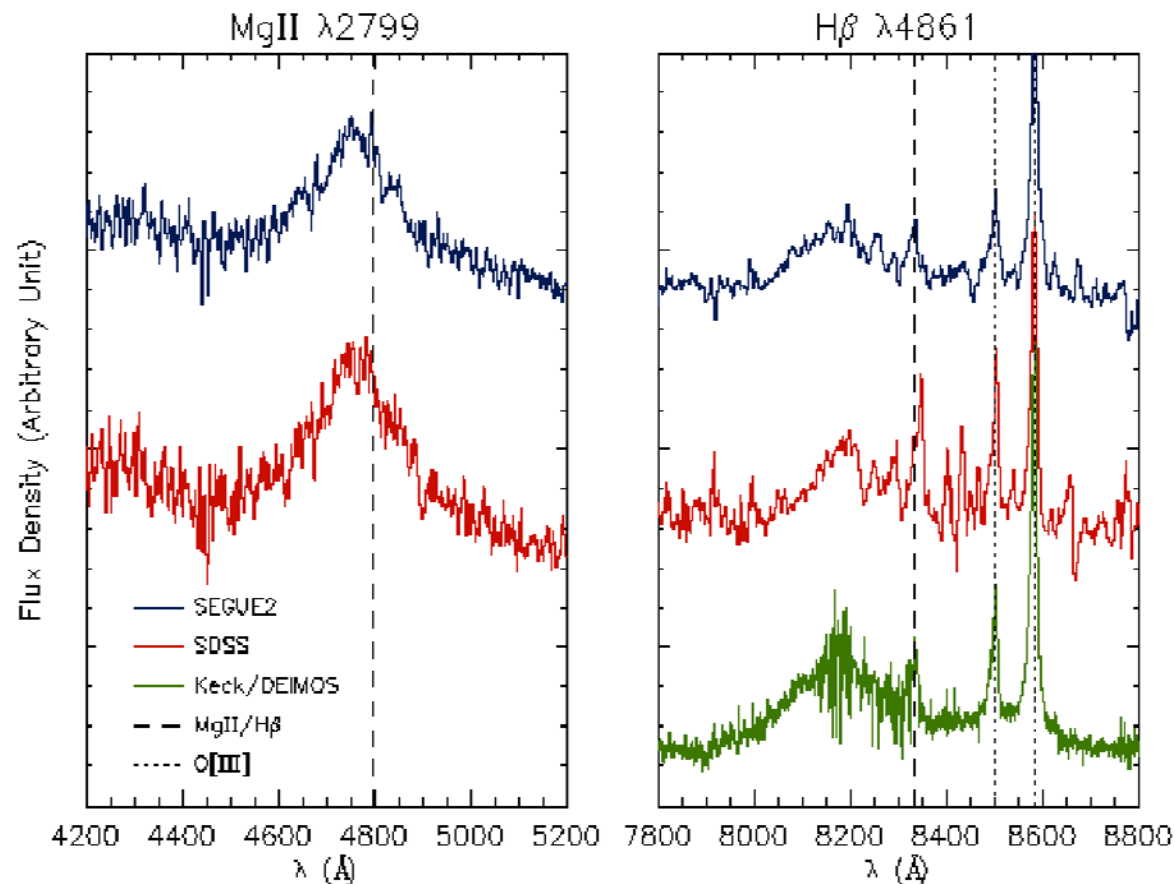
Malte Schramm, John Silverman, Rachael Alexandroff, Peter Capak,
Francesca Civano, Martin Elvis, Dan Masters, Bahram Mobasher,
Petchara Pattarakijwanich, Michael Strauss

Steinhardt et al. 2012, ApJ, 759, 24 (arXiv:1209.1635)

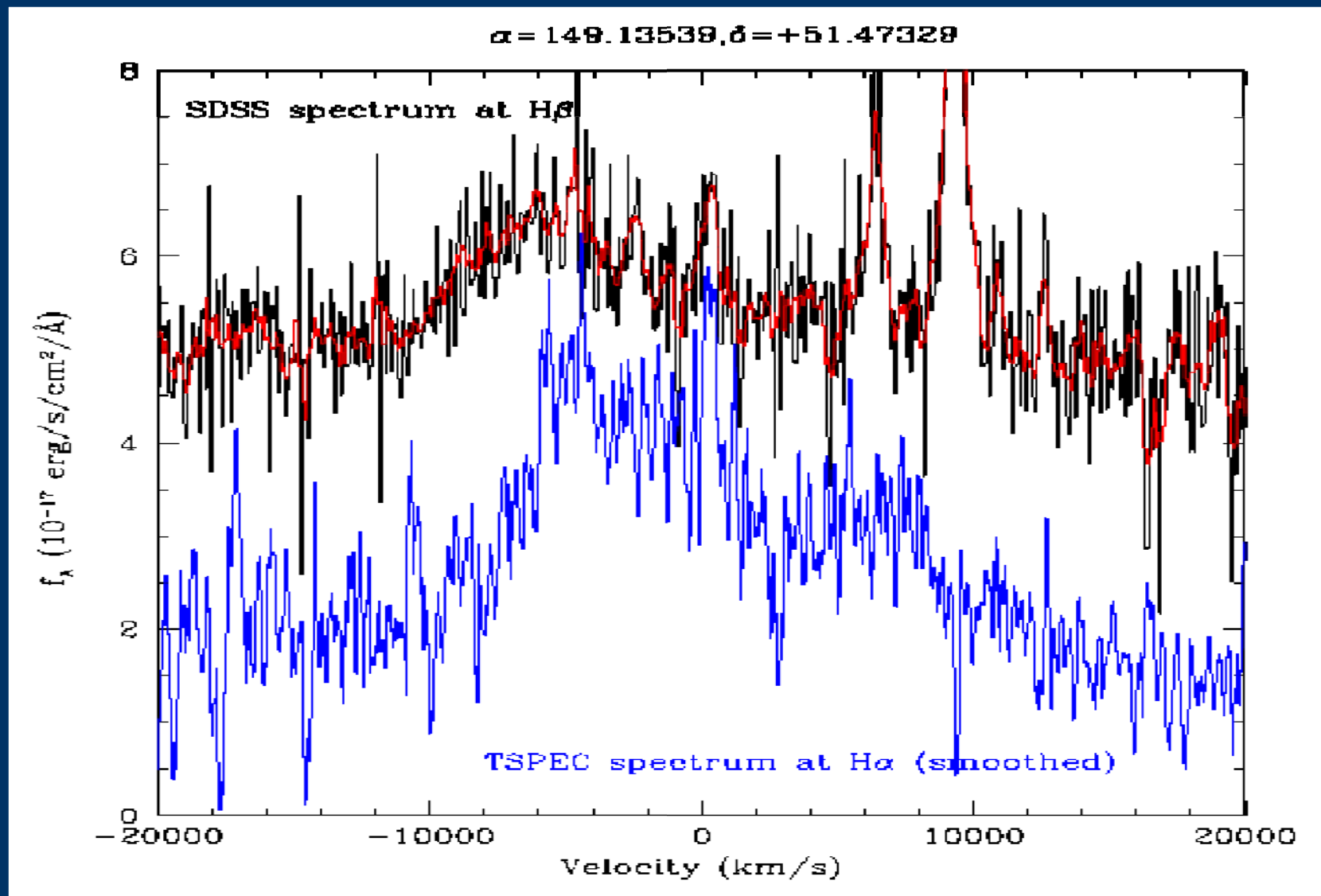
SDSS 0956+5128 from SDSS DR3



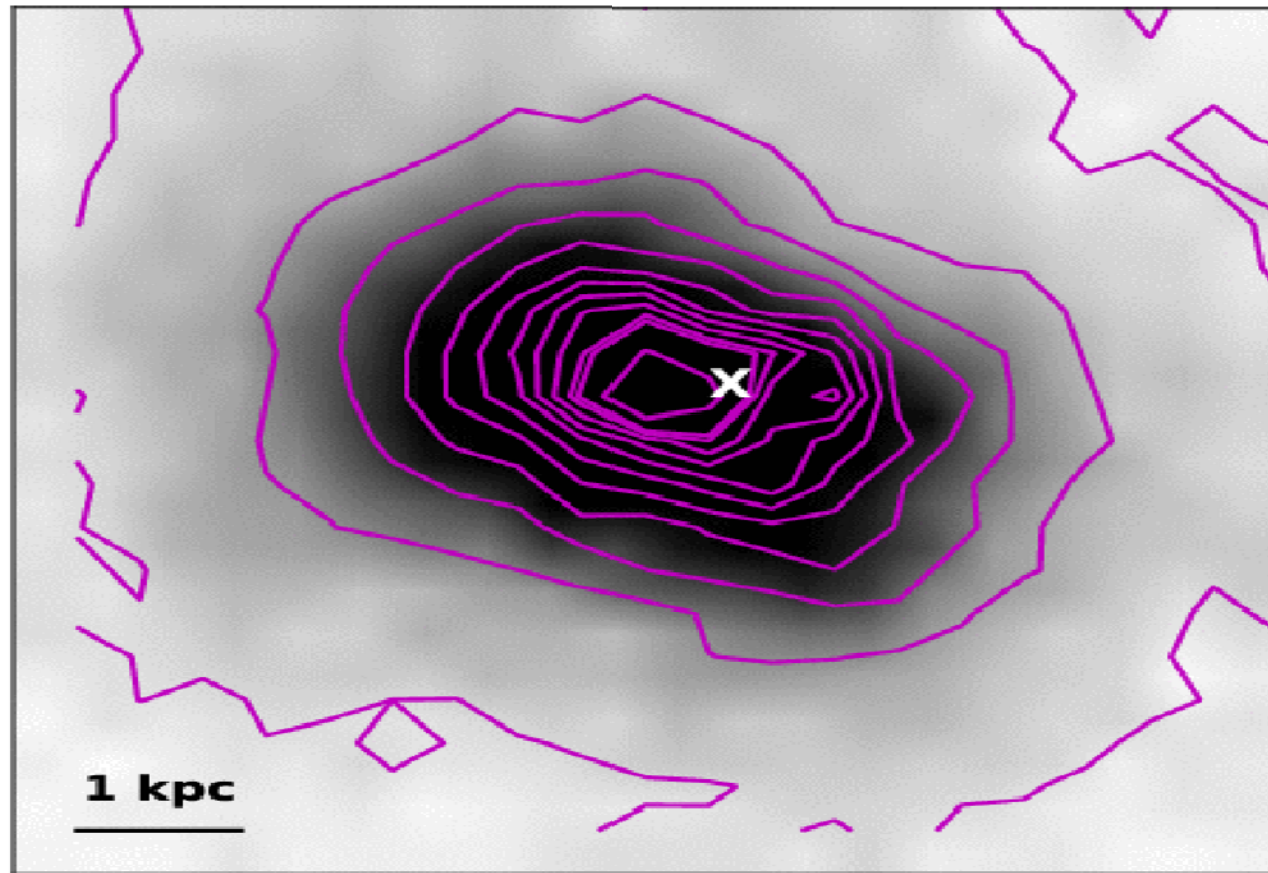
MgII and H β Emission



Comparison of $H\alpha$ and $H\beta$



K-band image (Subaru IRCS)



Summary of Emission Lines

EMISSION LINE PROPERTIES OF SDSS 0956+5128.

Line	z	Observations	Clear asymmetry
MgII λ 2798	0.707	DR3, SEGUE-2	No
[O II] λ 3727	0.714	DR3, SEGUE-2	No
H β λ 4861	0.690	DR3, SEGUE-2, DEIMOS	Yes
[O III] λ 4959	0.714	DR3, SEGUE-2, DEIMOS	No
[OIII] λ 5007	0.714	DR3, SEGUE-2, DEIMOS	No
H α λ 6563	0.690	TripleSpec	Yes

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...and what does this mean for selecting multiple
BH systems using one spectral line?