# <u>LYMAN-ALPHA HALOS AROUND Z~I RADIO GALAXIES</u>



## HST/STIS PRISM IMAGES OF LYMAN-ALPHA AT Z~I

### **SUMMARY:**

WE OBTAINED HST/STIS SLITLESS NUV PRISM SPECTROSCOPY OF FIVE Z~I POWERFUL RADIO GALAXIES. FOUR SHOW LYMAN-ALPHA EMISSION BUT AT MUCH LOWER (AT LEAST ONE ORDER OF MAGNITUDE) LINE LUMINOSITIES THAN THEIR Z~3 COUNTERPARTS AND WITH POSSIBLY DIFFERENT MORPHOLOGIES.

NO "HIGH-Z" TYPE HALOS SEEM TO BE PRESENT AT Z~I

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### **EVOLUTION OF LYMAN-ALPHA AROUND RADIO GALAXIES**

### **PHYSICS:**

**CHANGE IN THE PHYSICAL** MECHANISM RESPONSIBLE FOR THE LY-ALPHA EMISSION?

**RIGHT: RATIO OF X-RAY INFERRED IONIZING FLUX AND LYMAN-**ALPHA FLUX AS A FUNCTION OF **REDSHIFT**.

IS THERE AN ADDITIONAL ENERGY SOURCE AT HIGH-Z ABSENT BY Z~1?

