# The chemical evolution of the neutral gas reservoirs of the Universe

Trystyn Berg*[1]

[1]European Southern Observatory [Santiago] – Chile

**Abstract**

Quasar sightlines through intervening material provide insights into the evolution of gaseous reservoirs within and surrounding galaxies across cosmic time. With the advent of high resolution spectrographs on 8m class telescopes, quasar absorption line systems are excellent probes of the chemical evolution of neutral gas, providing an orthogonal approach to detailed stellar abundances in the Local Group. In this talk I will present recent work focussing on using both damped and sub-damped Lyman alpha systems to study the chemical enrichment of the Universe from the XQ-100 survey between redshifts 2 and 4. I will highlight what these quasar absorbers can tell us about enrichment of both the interstellar and circumgalactic media based on detailed chemical abundances.

*Speaker