

Invited lecture

FOLLOWING H_β TO $Z \sim 3$

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Studies of broad emission line profiles provide insights into the geometry and kinematics of the central regions of quasar. They also allow direct estimates of the central black hole mass and source Eddington ratio. For all of these studies H_β has been the line of choice both because it can be studied over such a wide z range and because it is thought to arise from a virialized cloud distribution. We have been using VLT ISAAC to follow H_β into the infrared (to $z \sim 3$) providing intermediate z line profile measures in unprecedented numbers ($n > 50$) and high s/n . We report on these measures and compare line profile properties, BH masses and Eddington ratios over a 6dex source luminosity range.