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Poster

THE RADIO DICHOTOMY IN EXTREME OBJECTS: STUDYING QUASARS WITH FWHM GREATER THAN 15000 km/s $\,$

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The galaxies which are powered by supermassive black holes that accrete mass from their surroundings are called active galactic nuclei (AGN). Quasars which are known to be the most luminous AGN when observed through the radio window, can be defined largely into two categories, namely radio-loud and radio-quiet quasars. Surveys have shown radio-loud (RL) quasars constitute 10%-15% of the total quasar population and rest are radio-quiet (RQ). However, it is unknown if the radio-loud fraction or RLF (RL quasars/Total quasars) remains consistent among different parameter spaces. This study shows that RLF increases for increasing full width half maximum (FWHM) velocity of the $H\beta$ and MgII broad emission line. Our data has been obtained from Shen et al.(2011) catalogue. To investigate the reason for increment, in this preliminary study we analyse various properties of the broadest line RL quasars and RQ quasars and we have found the difference of RL and RQ quasars only in luminosities. From our results we also have predicted accretion disk-jet connection and also predicted thick disk accretion for our sample .