

Talk at Splinter Meeting

Splinter A

SIMULATING QUASAR POPULATIONS, AND A SIMPLE EXPLANATION
FOR THE SUB-EDDINGTON BOUNDARY

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A series of papers published by Steinhardt and Elvis in 2009 and 2010 took a look at observed quasar populations in several red-shift bins, and the boundaries of those populations in the mass-luminosity plane. They found that the populations were bound by a set of limits. One particular boundary they found was named the sub-Eddington boundary, and Steinhardt and Elvis investigated the origins of this boundary. We present a simple method to acquire simulated quasar populations by simulating a large number of singular quasars. Using these simulations, we take another look at the sub-Eddington boundary and propose that its origin is merely a statistical effect. We propose that it results from quasars evolving particularly quickly through this region, thus severely lowering the chances of observing quasars in this region of the mass-luminosity plane.