

The sources of the X-ray background

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Abstract

The latest developments on the synthesis models for the X-ray background will be presented. Thanks to a fully self-consistent approach based on the most up to date results from the various deep *Chandra* and *XMM-Newton* surveys we are able to put quantitative constraints on the properties of both heavily obscured Compton Thick AGN and luminous type 2 quasars. Model predictions for the number counts of obscured AGN in both the very hard (> 10 keV) and far infrared bands are presented. The implications of our findings for the obscured growth of Black Hole masses will also be discussed.