

## **The Obscured Black-Hole Growth Phase of Distant Star-Forming Galaxies**

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### **Abstract**

Deep submillimetre surveys have uncovered a population of dust-enshrouded star-forming galaxies at  $z \approx 2$ , which appear to be the progenitors of massive ( $> M_*$ ) galaxies in the local Universe. Using the ultra-deep 2 Ms *Chandra* Deep Field-North survey we recently showed that a large fraction of these systems also host obscured AGN activity and are therefore undergoing an obscured black-hole growth phase. I will present our latest results on the properties of the AGN in these galaxies and provide new constraints on the masses of their black holes, using the well-established virial mass estimator. Using these results I will argue that the growth of the black hole lags that of the host galaxy in these massive systems, apparently in contradiction with that found for luminous quasars.