What Is The Relation Between Jet Flow Dynamics And Energy Radiated From Large Scale Radio Jets?

- The image shows a ROSAT hard X-ray band (0.5 2.9 KeV) overlaid with 1384 MHz (20 cm) contours in ESO IG022-N/S, two merging galaxies in Abell S0102.
- An X-ray luminosity of 8.6 x 10⁴² erg s⁻¹ has been estimated for the total emission, suggesting that the emission is due to hot gas lying in the potential well of the cluster.
- Because of insufficient energy transfer from the relativistic electrons that produce synchrotron radiation to the thermal gas in the cluster, the best model for the X-ray emission may be thermal bremsstrahlung from gas in the ICM, and this emission appears to confine the jet from the southern galaxy.

