RADIO AND X-RAY OBSERVATIONS OF NGC 1052

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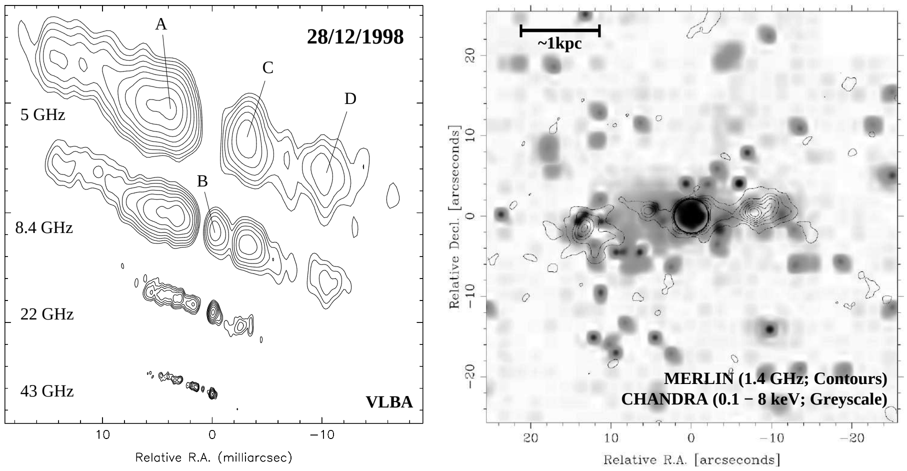

Figure 1. Left: The twin jet of NGC 1052 at milliarcsecond resolution observed with the VLBA between 5 and 43 GHz. Component B is totally absorbed at 5 GHz indicating a region of strong free-free absorption. Right: The X-ray jet of NGC 1052 at a resolution of 4″. Overlaid are the radio contours at 1.4 GHz.

From our observations of NGC 1052 with the Very Long Baseline Array and CHANDRA (see Figure 1) we found evidence for the presence of a central obscuring torus (Kadler et al. 2002, Proc. of the 6th EVN Symp., p.167). The absorbing column density of the torus obtained from both radio and X-ray frequencies is of the order of a few times $10^{22}\,\mathrm{cm}^{-2}$. We found an X-ray jet associated with the kiloparsec-scale radio jet of NGC 1052 with the spectral signature of a thermal plasma, most probably due to an interaction of the jet and its ambient medium.