

## Double nuclear structure discovered in 3C84

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3C84 is a nearby active galaxy, where we can directly image the launching region of the jet. We observed the source with the Global millimeter VLBI Array (GMVA) with better than 50 micro-arc-sec resolution over 8 years. These observations revealed a consistent double nuclear structure separated by  $\sim 700$  Schwarzschild radii, with the region being too broad and too bright to be the true jet base anchored in an accretion disk. We find a significant correlation between the brightness temperature and relative position angle of double nuclear components. We interpret this as being due to the expansion and cooling of a synchrotron emitting jet sheath. The cooling timescales appeared to be typical of blazar-like emission. We find a direct evidence non-relativistic kinematics in the region very close to the black hole.