How can weakly magnetized stars drive fast jets?

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Most models of jet launching rely on a magnetic field in either the central source, the accretion disk or both. However, the well-studied nearby young Herbig Ae star HD 163296 has a measured weak stellar magnetic field (main-sequence A stars do not have magnetic fields at all), and even indications of X-ray emission in its jet. Comparing archival to new third epoch HST/STIS observations we have a long time baseline to study the evolution of velocity, temperature and density in the Herbig-Haro objects of the jet.

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Start: Optical jet

FUV observations

X-ray observations

Summary
- HD 163296 did drive a jet in the past.
- No bright knots are detected in Lyα now.
- Signal in the X-rays is dodgy.
- No new knots are detected in Hα.

Hypothesis
HD 163296 did drive a jet in the past for at least 80 yr (Wassell et al. 2006). So our hypothesis is: The central driving switched off some time between 2004 and 2012.
Hubrig et al. (2007) did not find a magnetic field. Maybe HD 163296 stopped driving its jet, because the magnetic field switched off and weakly magnetized stars in fact cannot drive fast jets?