Two spectacular tails of X-ray emission have been found trailing behind the galaxy ESO 137-001 as it plunges into a cluster of galaxies. The brighter of the two tails has been seen before in Chandra data (shown in blue), and extends for about 260,000 light years behind the galaxy. The detection of the second, fainter tail, however, was a surprise to the scientists who used Chandra for a subsequent longer observation of this system. The two-pronged tail may have formed because gas in the galaxy has been stripped from two of its major spiral arms. Also shown in this image are optical data in yellow and emission from hydrogen atoms ("H-alpha") in red.