This composite image shows a tail that has been created as the galaxy ESO 137-001 plunges into the galaxy cluster Abell 3627. X-rays from Chandra (blue) and optical light (white and red) from the SOAR telescope show that as the galaxy plummets, it sheds material and is forming stars behind it in a tail that stretches over 200,000 light years long. This result demonstrates that stars can form well outside of their parent galaxy.