Out of the Box Thinking: Kinematics from a 163 Million-Year-Old Dinosaur Trackway

SCOTT LEE, University of Toledo — Dinosaurs always grab the interest of students. Information about dinosaur locomotion is accessible from the trackways they left. In a unique connection to kinematics, evidence of the acceleration of a meat-eating dinosaur (theropod) is evident in Trackway 13 in Ardley Quarry in Oxfordshire, UK. This particular trackway is described by J.J. Day, D.B. Norman, P. Upchuch and H.P. Powell in Vol. 415 of Nature on pages 494 and 495, published in 2002. This particular theropod underwent an acceleration of about $g/3$. This example provides a fun and engaging exercise for students studying kinematics.