

Abstract Submitted  
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**Statistical evidence of predation by theropods – using physics to understand the lives of dinosaurs** SCOTT LEE, Un. of Toledo — Dinosaurs hold a great fascination for everyone and provide an interesting venue for teaching many elementary concepts of kinematics. Dinosaur trackways provide interesting information about the locomotion of these extinct animals. A statistical analysis of the known trackways made by theropods (carnivorous dinosaurs) shows that they usually moved by walking with an average speed of  $2.4 \pm 1.5$  m/s. Fast running, determined by a relative stride length of 3 or greater, is observed in about 4% of the trackways, corresponding to running speeds of 6 m/s or higher. These trackways are believed to have been formed during predation.

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