

Abstract for an Invited Paper  
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**Experimental measurement of the aerodynamic properties of golf balls**

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Accurate measurements of the lift, drag and spin rate decay characteristics of golf balls are necessary to predict the golf ball trajectory and its point of impact. Three principal methods are used to determine these characteristics: (1) wind tunnel testing using a lift and drag balance; (2) outdoor testing using a tracking camera, whereby the trajectory and spin of the golf ball is monitored during flight, and (3) indoor testing, whereby the trajectory is broken down into various Reynolds number regimes and each regime is tested by launching the golf ball over a heavily-instrumented short indoor range. Here, we discuss the relative merits of each testing technique, and demonstrate how the output of the tests is used in a trajectory program to simulate the flight of the ball.

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