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The Physics of NASCAR: Why Going Fast is Harder than You Might Think

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NASCAR is unique among major sports in that science, math and engineering are integral to winning. You can't win races without getting the physics right. That constraint provides a novel way to reach the seventy-five million NASCAR fans who desperately want to understand why their driver is (or isnt winning). Unlike outreach to those already interested in science, using popular culture to reach out requires taking advantage of unexpected events and non-traditional means. Does a loose piece of metal really justify a $100,000 fine? (NPR didn't think so...) From the science of designing a 900-horsepower, 200 mph aerodynamic bullet to the knowledge and experience required to drive that car, physics is the ultimate arbiter of speed. Moving from simple introductory physics that approximates a race car as a point particle to computational fluid dynamics, you'll learn why driving fast isnt as easy as you might think.