The Science Behind Spin Bowling: The Magnus Effect

Spin bowling involves delivering the ball with extra revolutions, causing it to dip unexpectedly. The Magnus effect explains this phenomenon:

* As the ball spins, it separates the incoming air into two streams.
* The lower stream flows smoothly with the spin, while the upper stream experiences turbulence.
* This creates a pressure difference, with a higher pressure zone above the ball and a lower pressure zone below it.
* According to Newton's third law, the pressure difference generates a downward reaction force, making the ball dip and land earlier than anticipated.
* This effect is evident in various sports, such as cricket, tennis, and golf.