

# How Competition Swimwear affects the Technology of Swimming



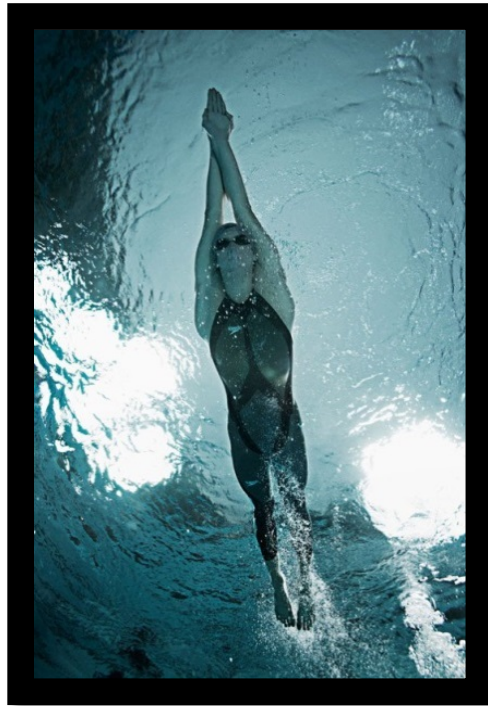
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A Real World View of Applied Math and Statistics

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### **Abstract**

The LZR Racer Suit, reportedly the world's fastest swimsuit, can lower a swimmer's racing times by 1.9 to 2.2 percent. The suit was developed by Mectex, an Italian company, and it was launched in February 2008. Like many other suits used for competition ratings, the LZR Racer Suit allows for better oxygen flow to the muscles and holds the body in a more hydrodynamic position, while repelling water and increasing flexibility. The seams of the suit are ultrasonically welded to further reduce drag. The suit is also 100% chlorine resistant and quick drying. The suit includes patented Core Stabilizer and Internal Compression Panels.

This paper investigates whether the LZR Racer Suit influences the time improvements of competitive swimmers who also utilize different training regimes and strategies.