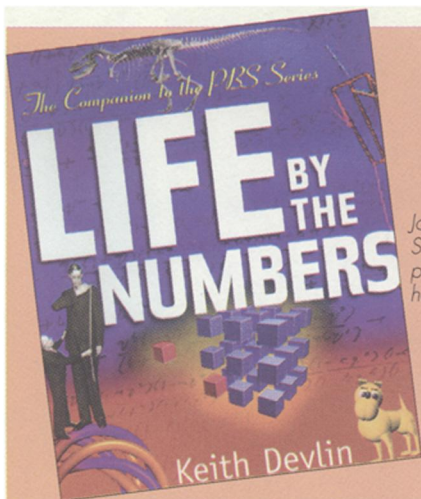


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Brain Repair



John Wiley & Sons, 1998, 214 pages, 7 1/2" x 9 1/2" hardcover, \$29.95.



Why do leopards grow spots

when tigers grow stripes? Is the universe round, square, or some other shape? How do the dimples in a golf ball give it greater lift?

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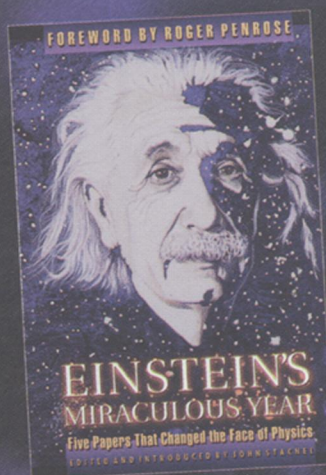
The best-known papers are the two that founded special relativity: *On the Electrodynamics of Moving Bodies* and *Does the Inertia of a Body Depend on Its Energy Content?* In the former, Einstein showed that absolute time had to be replaced by a new absolute: the speed of light. In the second, he asserted the equivalence of mass and energy, which would lead to the famous formula $E = mc^2$.

The book also includes *A New Determination of Molecular Dimensions*, Einstein's doctoral dissertation, which shows how to calculate Avogadro's number and the size of molecules.

The next paper *On the Motion of Small Particles Suspended in Liquids at Rest Required by the Molecular-Kinetic Theory of Heat* concerns the Brownian motion of such particles and includes an equation for their mean free path as a function of the time. The final Nobel-Prize-winning paper is *On a Heuristic Point of View Concerning the Production and Transformation of Light*, in which Einstein challenged the wave theory of light that begot quantum physics.

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