593 This Week in Science

Editorial

595 Brittle Books and Journals

Letters


News & Comment

602 Computers Amplify Black Monday
604 Gramm-Rudman-Hollings Strikes Back
605 Africa Begins to Face Up to AIDS
606 One AIDS Problem or Two?
607 Is the Time Ripe for Welfare Reform?
610 NASA Sets Shuttle Launch Dates, Investigates Main Engine Trouble
Merck Donates Drug for River Blindness

Research News

611 Chemistry in the Image of Biology
613 Structure of MHC Protein Solved
615 Receptors Highlighted at NIH Symposium ■ Receptor Gene Family Is Growing ■ Calcium Ions May Have Their Ups and Downs ■ New Role Proposed for α-Adrenergic Receptor

Policy Forum

617 New Directions for Space Astronomy: R. A. Brown and R. Giacconi

Perspective

622 Chernobyl: A Radiobiological Perspective: M. Goldman

Articles

638 Actin Polymerization and ATP Hydrolysis: E. D. Korn, M.-F. Carlier, D. Pantaloni

Research Articles

645 Sequence-Specific Cleavage of Double Helical DNA by Triple Helix Formation: H. E. Moser and P. B. Derb

Even systems as simple as a periodically forced damped pendulum can have complex behavior. This computer-generated plot shows initial pendulum velocities (measured horizontally) and positions (measured vertically). Orbits starting at points in the red region eventually settle into one type of periodic motion, while orbits starting in the blue region yield a different type of periodic motion. The boundary between these regions is fractal. The lighter the shade of red or blue, the longer it takes to settle into the corresponding motion. See page 632. [Photo courtesy of C. Grebogi, E. Ott, and J. A. Yorke, University of Maryland, College Park, MD 20742]