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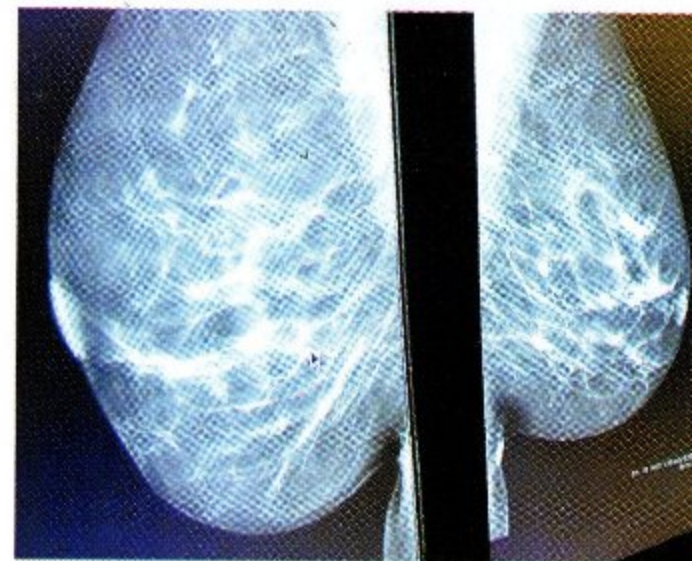
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COVER

"Branching Morphogenesis," an installation made from more than 75,000 interconnected cable zip ties, illustrates the predicted forces generated by human lung endothelial cells as they form networks within an extracellular matrix over time. Winners of the 2009 *Science/NSF* International Science & Engineering Visualization Challenge are featured in a special section starting on page 945.

Image: *Jenny E. Sabin*; installation: *Peter Lloyd Jones, Jenny E. Sabin, Andrew Lucia, Annette Fierro/Sabin+Jones LabStudio, University of Pennsylvania*

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984 The Silicate-Mediated Formose Reaction: Bottom-Up Synthesis of Sugar Silicates

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986 Asymmetric Cooperative Catalysis of Strong Brønsted Acid–Promoted Reactions Using Chiral Ureas

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990 100-Million-Year Dynasty of Giant Planktivorous Bony Fishes in the Mesozoic Seas

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993 Climate, Critters, and Cetaceans: Cenozoic Drivers of the Evolution of Modern Whales

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1004 Acetylation of Metabolic Enzymes Coordinates Carbon Source Utilization and Metabolic Flux

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1010 Peptidomimetic Antibiotics Target Outer-Membrane Biogenesis in *Pseudomonas aeruginosa*

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1014 NMR Structure Determination for Larger Proteins Using Backbone-Only Data

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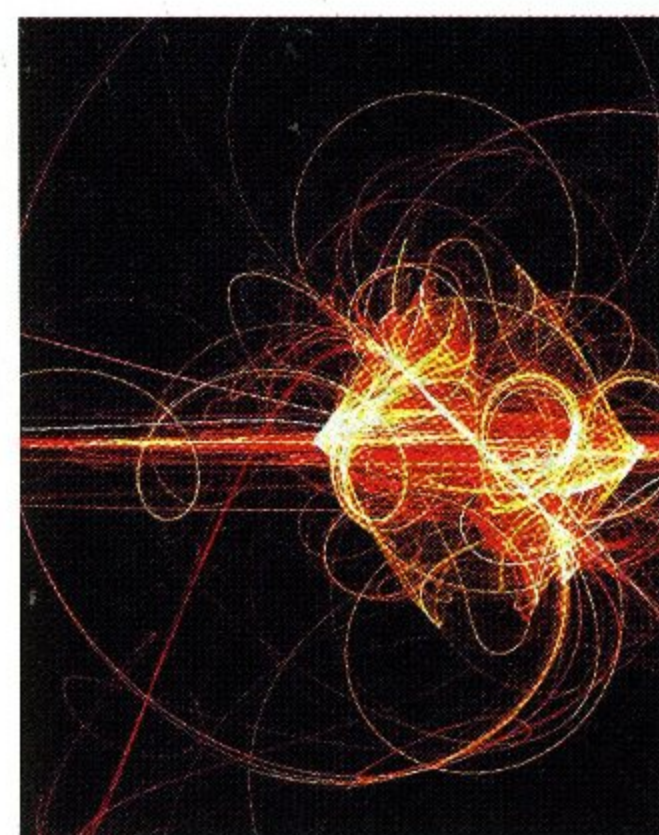
Protein structures can be determined by using the limited nuclear magnetic resonance information obtainable for larger proteins.

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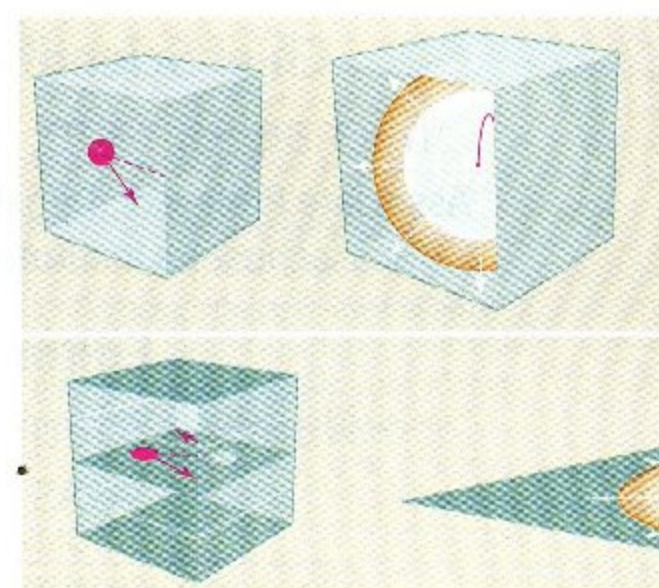
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Analysis of the trajectories of people carrying cell phones reveals that human mobility patterns are highly predictable.
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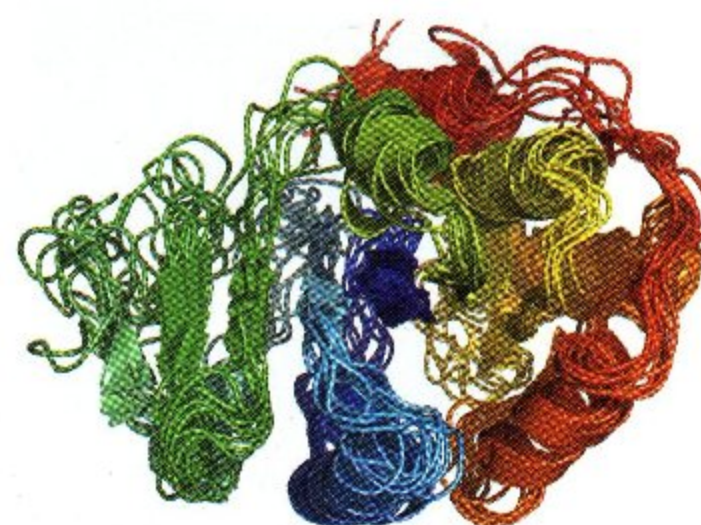
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