998-60-2 **Persi W. Diaconis\***, Stanford University. A mathematician flips a coin.

Is coin tossing 'random' or 'physics'? Richard Montgomery and I have carefully done the physics and can prove coins have a real bias to come up the same way they started. Quantifying the bias involves an excursion into super-slow motion cameras, inverse problems and Tayberian theorems. (Received August 12, 2003)