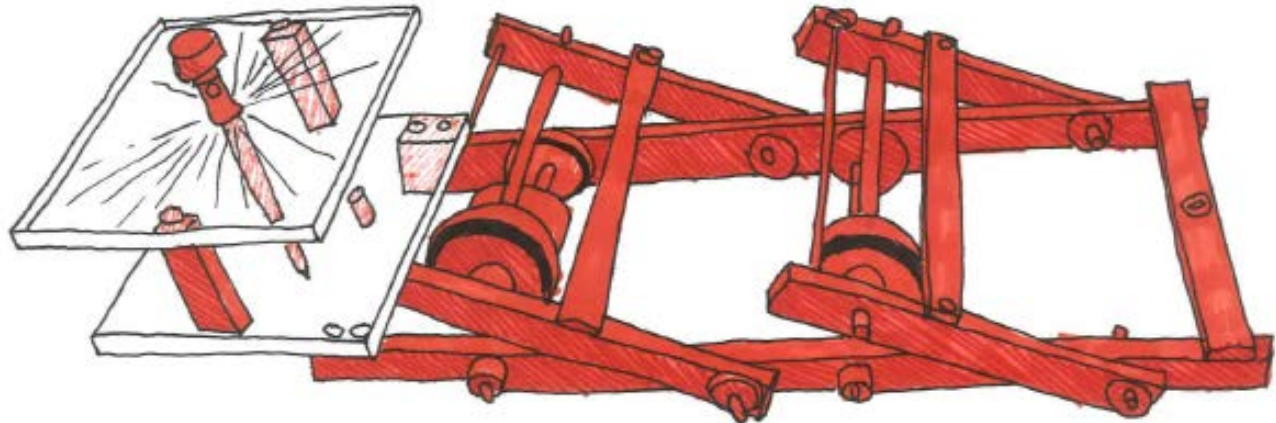


What is the FERMIAC or Fermi Trolley?



The Fermiac is commonly described as an analog computer. That is, a computer whose behavior is an analogy, or similar to the action of the object it is simulating. Enrico Fermi invented it at a time when computers were still just appearing, and nuclear weapons work just couldn't wait. It was constructed out of brass and acrylic sheet by L. D. P. King at Los Alamos Scientific Laboratory.

Los Alamos physicists, or their graduate students, rolled the Fermiac across engineering drawings, its path dictated by values in random number tables. It was tracing the probable paths of neutrons through dense materials. By repeating this procedure many times, scientists could build up a statistical model of neutron behavior. As tedious as this tool was to use, it was used for about two years before being superseded by the earliest similar but digital computer programs.

The Fermi Trolley is on display in the supercomputing exhibit in the Research Gallery at the Bradbury Science Museum in Los Alamos, New Mexico.

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