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The sun shines brightest at night: Reflections on the solar neutrino problem.

R. G. H. (HAMISH) ROBERTSON, University of Washington

The flux of neutrinos from the suns core depends on the rate at which the sun produces energy, a testable prediction as Ray Davis realized in the early 1960s. How that test turned out is one of the best-known and most dramatic stories in physics. With the hindsight of our current understanding, it is interesting to look back at the experimental and theoretical steps that led to the disclosure of new properties of nature. It was a truly international adventure, but the US played a particularly strong role in these achievements. The study of solar neutrinos continues to offer tantalizing scientific rewards, and we conclude with a look at what the future might hold.