An Alternative and Surprising Solution to Olbers’ Paradox

Y. Diao and A. Stasiak

Abstract

In this paper, we prove that a self-avoiding walk of infinite length provides a structure that would resolve Olbers’ paradox. That is, if the stars of the Universe were distributed like the vertices of such a random walk of infinite length, then the night sky could be as dark as actually observed on the Earth.

2000 AMS Subject Classification: 40A