

Gravity from Order and Number: Causal Sets

Rafael D. Sorkin
Perimeter Institute for Theoretical Physics
Waterloo, ON N2L 2Y5

Abstract

Among the various ideas put forward in the search for a theory of quantum gravity, the causal set hypothesis is distinguished by its logical simplicity and by the fact that it incorporates the assumption of an underlying spacetime discreteness organically and from the very beginning. After presenting the problem of quantum gravity in general, I will precis the causal set programme and touch on some old and some recent developments.