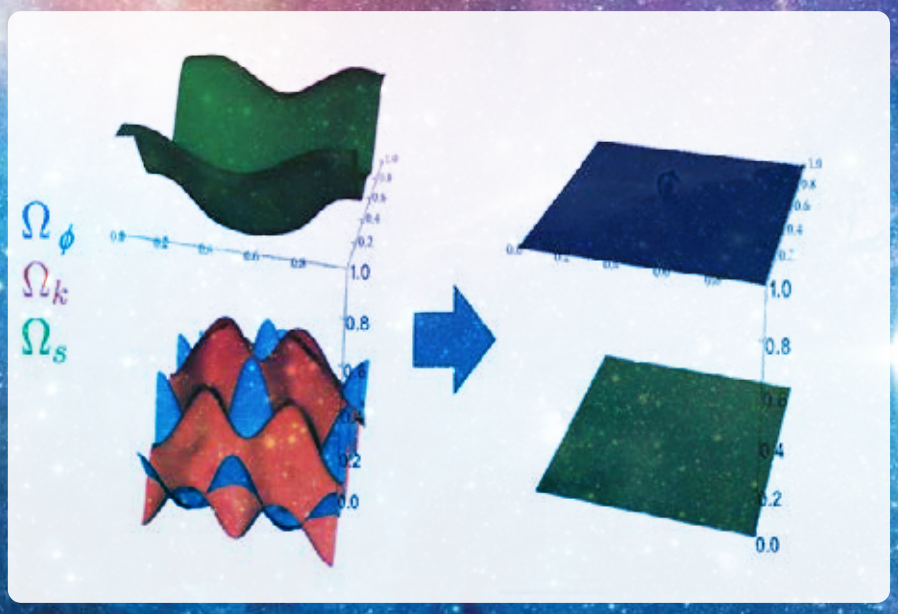


פרופסור פול שטיינהרדט

פרופסור למדעים ע"ש אלברט איינשטיין
המחלקות לפיזיקה ולמדעים אסטרופיזיים
אוניברסיטת פרינסטון, ניו ג'רזי, ארה"ב

Professor Paul Steinhardt

Albert Einstein Professor in Science
Departments of Physics and Astrophysical Sciences
Princeton University, New Jersey, USA

Physics Department Colloquium | קולוקוויום המחלקה לפיזיקה

HOW THE UNIVERSE BECAME SMOOTH AND FLAT

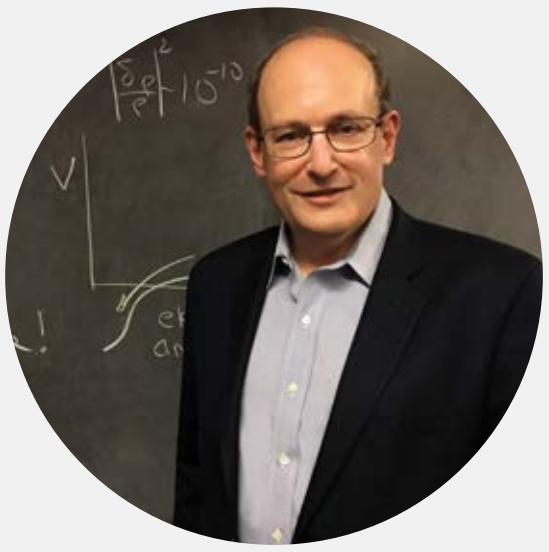
Abstract

The greatest challenge for any theory of the early universe is to explain how the universe became homogeneous, isotropic, and spatially flat. These conditions are unexpected after the universe emerges from a big bang. Inflation was invented to solve this problem, but does inflation actually work? And is there an alternative?

The Colloquium will be held on Sunday
28 December 2025, at 14:00
Melamed Hall (6), Shenkar Building,
Tel Aviv University, Ramat-Aviv

הקולוקוויום יתקיים ביום ראשון
28 בדצמבר 2025, בשעה 14:00
אולם מלמד (6), בניין שנקר
אוניברסיטת תל-אביב, רמת-אביב

Light refreshments will be served before the colloquium | כיבוד קל יוגש לפני הקולוקוויום



Paul Steinhardt

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HOW THE UNIVERSE BECAME SMOOTH AND FLAT

December 28, at 14:00

Melamed Hall (6), Shenkar Building

PAUL STEINHARDT is one of the world's leading theoretical physicists, renowned for his pioneering contributions to cosmology, particle physics, and condensed matter physics. He is among the original architects of the inflationary model of the universe and later co-developed the bouncing and cyclic cosmological models. He also introduced the concepts of quintessence and self-interacting dark matter.

In condensed matter physics, he co-discovered quasicrystals, a new phase of solid matter, and led the expedition that uncovered the first natural quasicrystal in northeastern Russia. Prof. Steinhardt is a Fellow of the U.S. National Academy of Sciences and the American Physical Society, and a recipient of the Dirac Medal, Oliver E. Buckley Prize, and John Scott Award, among others.

He is the author of over 200 scientific articles and several books, including Endless Universe: Beyond the Big Bang (with Neil Turok, 2007) and The Second Kind of Impossible (2019).