



UNIVERSITY OF MIAMI
COLLEGE of
ARTS & SCIENCES

Miami Physics Conference 2024

Date: Dec 12-19, 2024
Location: Lago Mar Resort
Affiliation: University of Florida

Wei Xue

Unparticle Decay

Abstract

Unparticle decay into Standard Model particles is a subtle question due to the complex structure of the unparticle propagator. However, understanding this decay process is crucial for studying the cosmology and collider phenomenology of unparticles. To address this, I will present three models to understand unparticle decay: a quantum mechanics toy model, a flat 5D model, and a 4D strongly coupled conformal field theory (CFT).