Department of Physics Colloquium

Speaker: Dr. Pervez Hoodbhoy

Retired Professor, Quaid-i-Azam University, Pakistan and Adjunct Professor, University of Brunswick

"Decay of the False Vacuum: Applications in Condensed Matter, QCD and Cosmology"

Open to the public, free of charge

Monday, April 22, 2024 – 4 p.m. – 1110 Rood Hall

Refreshments: 3:30-3:50 p.m., Bradley Commons, 2202 Everett Tower

Abstract: This talk will be a pedagogical review of tunneling phenomena in quantum mechanics and quantum field theory suitable for graduate students. Starting with a quick introduction to the Feynman path integral, I will develop the idea of instantons in QM, move to QFT, and then apply to phase transitions in condensed matter systems, tunneling between topologically separated QCD vacua, and the very early universe.

