
Contribution ID: **16** Type: **not specified**

# The Brief Femtouniverse

*Thursday 14 August 2025 14:15 (30 minutes)*

No technique used to compute observables, such as the 1/N-expansion or the bootstrap method, is successful for QCD. A method which should work, at least in principle, is a semiclassical van-Vleck formula, applied to the femtouniverse: a small region of Euclidean space-time. This yields a renormalization-group transformation to a lattice model which should be a correct description of the continuum field theory at large distances. To test the method, we apply it to the (well-understood) O(3) nonlinear sigma model in two dimensions.

**Presenter:** ORLAND, Peter