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# Conformal Lattice Field Theory on Spherical Manifolds

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Lattice radial quantization is a nonperturbative method especially suited to numerically solve Euclidean conformal field theories.
Tests are made for the critical surface of the
phi 4th theory at the Wilson-Fisher critical point
in 3D on R x S2 and in 2D on the Riemann sphere.
Simplicial lattice using the Finite Element Methods (FEM) or Regge calculus discretization are need to obtain full conformal symmetry
in the continuum. Possible applications to 4D gauge theories
are discussed.

**Primary author:** Dr BROWER, Richard (Boston University)

**Co-authors:** Prof. FLEMING, George (Yale University); CHENG, Michael (Boston University)

**Presenter:** Dr BROWER, Richard (Boston University)

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