

QFT Reading Seminar



Speaker: Arlo Caine
University of Notre Dame

Tuesday, April 12, 2011
12:15 pm
258 Hurley Hall

Title: The Gluing Formula for the Zeta Determinant of the Helmholtz operator

Abstract:

Essential to Pickrell's construction is the Gluing formula for Zeta Determinants of Elliptic Pseudodifferential operators due to Burghelea, Friedlander, and Kappeler. This relates the determinant of an operator on a closed manifold to the determinants of the same operator with boundary conditions on the two components of the manifold obtained by cutting along an embedded hypersurface. In this talk, I will explain why this holds in the context relevant for $P(\phi)_2$ theories and deduce the relevant version of the formula to be applied in Pickrell's construction.