Condensed Matter Theory Center Seminar

Adrian Del Maestro
(Johns Hopkins)

Tuesday, November 16
11:00am-12:30pm
2205 Physics Building

"Quantum Monte Carlo Studies of Luttinger Liquids"

We employ worm algorithm path integral quantum Monte Carlo methods to study one dimensional, strongly interacting bosonic systems at finite temperature in the continuum. An analysis of the resulting numerical data indicates corrections to the scaling predictions of the usual harmonic Luttinger Liquid theory that can be understood by extending the field theory to include formally irrelevant operators.