

# Light-front versus equal-time quantization in $\phi^4$ theory

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## Abstract

There is a discrepancy between light-front and equal-time values for the critical coupling of two-dimensional  $\phi^4$  theory. A proposed resolution is to take into account the difference between mass renormalizations in the two quantizations. This distinction was first discussed by M. Burkardt. It prevents direct comparison of bare parameters; however, a method proposed here allows calculation of the difference and thereby resolves the discrepancy.