

Abstract Submitted
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The Vacuum in Light Front Quantum Field Theories¹ MARC HERRMANN, WAYNE POLYZOU, University of Iowa — We study the light-front vacuum by comparing free fields with different masses. It is well known that the physical and Fock vacuum differ in the canonical field theories; however, for field theories quantized on a light-front the physical and Fock vacuum are identified. We use solvable free field theories to investigate the relation between the vacua and different representations of the free field theories in these different cases.

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