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## Light-Front Quantization from Then Until Now

*Wednesday 1 December 2021 10:00 (30 minutes)*

We trace the development of light-front quantization from its infinite momentum frame origin to its current formulation. We emphasize its difference from the infinite momentum frame approach especially in regard to vacuum loop diagrams. We identify the importance of off mass shell light-front contributions, especially in regard to circle at infinity contributions to vacuum Feynman diagram contours. We compare and contrast the instant-time and light-front quantization procedures and their respective Hamiltonians, and determine what we mean by non-relativistic in the light-front case. We show that the relativistic eikonal approximation should be formulated in light-front coordinates rather than in instant-time ones.

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