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Non-lorentzian supergravity and dualities

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1. The principle of relativity is not unique to Lorentzian theories.
2. Non-Lorentzian string theory is self-contained and stands as a UV completion of Newtonian gravity.
3. The target space dynamics of non-Lorentzian string theory can be described in terms of effective supergravity theories. The properties of these theories challenge the widely held assumptions about the structure of ten-dimensional supermultiplets.
4. There is a notion of lightlike T-duality. This can be seen as an infinite momentum limit of conventional T-duality and manifestly involves non-Lorentzian string theory.
5. Matrix theory is dual to non-Lorentzian IIA superstring theory. That is, the theory of D0 branes is dual to that of winding IIA strings. At the level of the background fields, this is implemented as a duality between particle and string Newton-Cartan geometry.
6. The consequences of supersymmetry in discrete lightcone quantization are more far-reaching than commonly stated. This should lead to a re-evaluation of the promises of matrix theory.
7. The central goal of a life in academia should be to work with both passion *and* precision. Without precision, research turns into glorified fever-dreaming. Without passion, it degenerates into anemic accountancy.
8. What we cannot speak about, we must pass over in silence.