

# Length Matters (I): The Einstein-Swann Correspondence and the Constructive Approach to STR

Hagar, Amit (2007) Length Matters (I): The Einstein-Swann Correspondence and the Constructive Approach to STR. In [2007] &HPS1: *Integrated History and Philosophy of Science 1*.

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## Abstract

In this paper and its sequel I discuss a rarely mentioned correspondence between Einstein and W.F.G. Swann on the constructive approach to the special theory of relativity, in which Einstein points out that the attempts to construct a dynamical explanation of relativistic kinematical effects require postulating a minimal length scale in the level of the dynamics. I use this correspondence to shed light on several issues under dispute in current philosophy of spacetime that were highlighted recently in Harvey Brown's monograph "Physical Relativity", namely, Einstein's view on the distinction between principle and constructive theories, and the philosophical consequences of pursuing the constructive approach to the special theory of relativity.

**Keywords:** Principle and constructive theories, Einstein, Relativity Theories, Quantum Theory, Substantivalism, Relationalism

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**Conferences and Volumes:**

[\[2007\] &HPS1: Integrated History and Philosophy of Science 1](#)

**ID Code:**

3487

**Deposited By:**

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**Deposited On:**

06 September 2007

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