

Hermann Minkowski and Relativity: Geometry and Axiomatics

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This lecture will survey the general background to Minkowski's incursion into relativity, of which Einstein's work represented just one side, and in which the rich and complex interaction between mathematics and physics in Göttingen since the turn of the twentieth century played a decisive role. It will explain Minkowski's formulation of special relativity in terms of space-time against the background of David Hilbert's program for the axiomatization of physics. At the same time, it will illuminate the changing relations of Einstein to mathematics, in the wake of Minkowski's work, and his willingness to attribute increasing significance to mathematical formalism in developing physical theories.