

Public Lecture

Organized by the *International Society for the Advanced Study of Spacetime* and the *Montreal Inter-University Seminar on the History and Philosophy of Science*

Spacetime and Reality

Does Hermann Minkowski's discovery of spacetime have implications for our view on reality?

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Hermann Minkowski
"Space and Time"
1908 - 2008

In 1908 Hermann Minkowski proposed that the consequences of the special theory of relativity could be regarded as manifestations of the four-dimensionality of a world in which time is the fourth dimension. In this four-dimensional world, which we now call spacetime, past, present, and future have equal existence. The crucial importance of the concept of spacetime for science has been well-established and is best demonstrated by the fact that modern physics would be impossible without it. But the situation is not the same with the impact of Minkowski's discovery on our view of reality. For a hundred years we have been owing Minkowski an answer to the fundamental question: "Is spacetime just a mathematical space or is it representing a real four-dimensional world with three spatial and one temporal dimensions?" I will outline possible answers to this question in such a way that will allow the audience to judge how our view of reality should be made compatible with the experimental evidence that supports the theory of relativity.

Date: Sunday, June 15, 2008

Time: 19:30

Room: H-110

Place: Concordia University, 1455 de Maisonneuve Boulevard West, 1st Floor
(Metro station Guy-Concordia, exit Guy Street)

Contact: 514-848-2424 ext. 2595

Website: <http://www.spacetimesociety.org/conferences/2008/lecture.html>

Admission: Free

Note: The Public Lecture will be held at the end of the *Third International Conference on the Nature and Ontology of Spacetime*, which will commemorate the one hundredth anniversary of Hermann Minkowski's talk "Space and Time". The conference (<http://www.spacetimesociety.org/conferences/2008/>) will be hosted by Concordia University on June 13-15, 2008.

