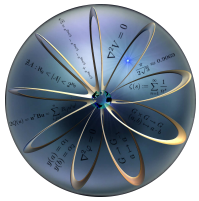

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Minkowski space

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Minkowski space is a 4 dimensional real vector space with a non-degenerate pseudo-metric of signature $(-+++)$.

More precisely, M with a metric g is a Minkowski space iff:

- M is a 4 dimensional real vector space
- g is a symmetric 2-covariant tensor (defines a quadratic form)
- g is non-degenerate (i.e. $\forall x \in M, g(x,y) = 0 \implies y = 0$)
- the `http://planetmath.org/SylvestersLaw`diagonalization of g contains one negative and three positive diagonal entries[1].

[1]this convention is sometimes reversed depending on notation