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Energy and momentum transferred by gravitational waves.

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The all presentation is an updated version of my paper printed in *Annalen der Physik* (Leipzig , 11 (2002) 441-455. (ArXiv: gr-qc.0102072). In this paper I have considered exact, non-linear gravitational waves in the framework of general relativity and showed that they transfer energy-momentum and angular momentum.

Summary

I will present my old proof that exact gravitational waves transfer energy and momentum. This proof was published in 2001 (*Annalen der Physik*, 11 (2002) 441-455). and relies on some kind of quasilocal quantities called canonical superenergy tensors.

My proof is local and it is complementary to old global proofs which were given in past by A. Trautman, H. Bondi, R.K. Sachs and others.

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