



# Time domain radiation and absorption by subwavelength sources

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Radiation by elementary sources is a basic problem in wave physics. We show that the time-domain energy flux radiated from electromagnetic and acoustic subwavelength sources exhibits remarkable features. In particular, a subtle trade-off between source emission and absorption underlies the mechanism of radiation. This behavior should be observed for any kind of classical waves, thus having broad potential implications. We discuss the implication for subwavelength focusing by time reversal with active sources.

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