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Poynting jets of force-free plasma: exact solutions and self-confinement TED JACOBSON, Univ of Maryland-College Park, SAMUEL E. GRALLA, University of Arizona — A class of exact, non-axisymmetric, translation invariant force-free Poynting jet solutions will be described. Remarkably, one can generate Poynting flux solutions by applying an arbitrary fieldline-dependent boost to a purely magnetic solution. In the infinite boost limit one obtains "null jets" that have vanishing electromagnetic pressure, so are self-confined without any external pressure.
S.E. Gralla and T. Jacobson, Phys. Rev. D 92, 043002 (2015)

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