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## Universal Kinematics for Event Generators

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The most common formulae for both inclusive and exclusive lepton scattering on nuclei frequently assume fixed-target or head-on collider kinematics. Using light-cone vectors defined by the incident beam four-momenta, I will present a universal basis of longitudinal and transverse four-vectors. This permits direct generation of particle four-momenta in the detector frame of a non-collinear collider, as well as direct adaptation to any specific theory formula or Monte Carlo generator that might be hard-wired to a particular frame. In particular, this approach provides a Lorentz-covariant definition of the azimuthal angles, which are not invariant with respect to arbitrary boosts.

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