Jet physics at HERA

H1 and ZEUS Collaborations

DESY, D-22603 Hamburg, Germany

The study of jet production at the *ep* collider HERA, both in photoproduction and deep inelastic scattering (DIS) processes, provides a rich testing ground of QCD, as well as an opportunity to probe the structure of the photon. Recent measurements are compared with QCD predictions, most of which are carried out in next-to-leading order. The possible topics are:

- Inclusive and exclusive jet cross sections.
- Multi-jet production in photoproduction and DIS.
- Dijet photoproduction and photon structure function; transition from real to virtual photon.
- Jet substructure; quark-, gluon-, and charm-jets.
- Determination of α_s from jet measurements.
- Forward-particle production and BFKL dynamics.
- Prompt photon production; intrinsic k_T of the partons in the proton.
- Strangeness production in *ep* scattering.