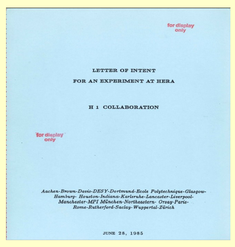
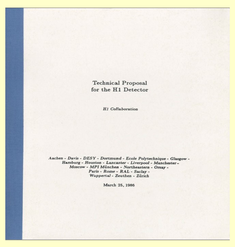
H1 Collaboration

From 1985 till today: 1196 physicists from 49 institutes and 19 countries





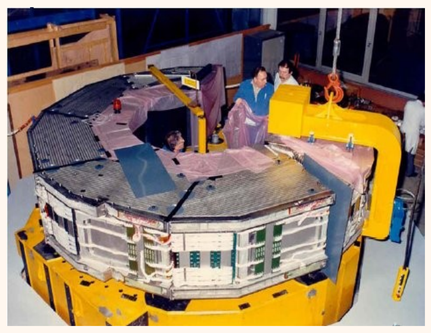
Letter of Intent, 1985

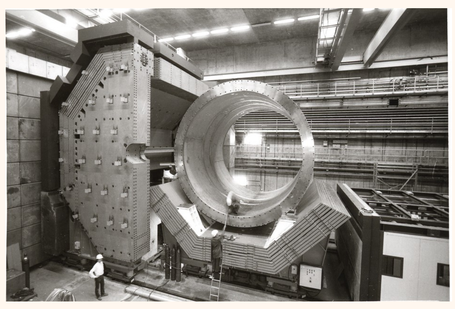
The First Collaboration meeting: DESY 1986

H1 Collaboration in the HERA North Hall, 1993

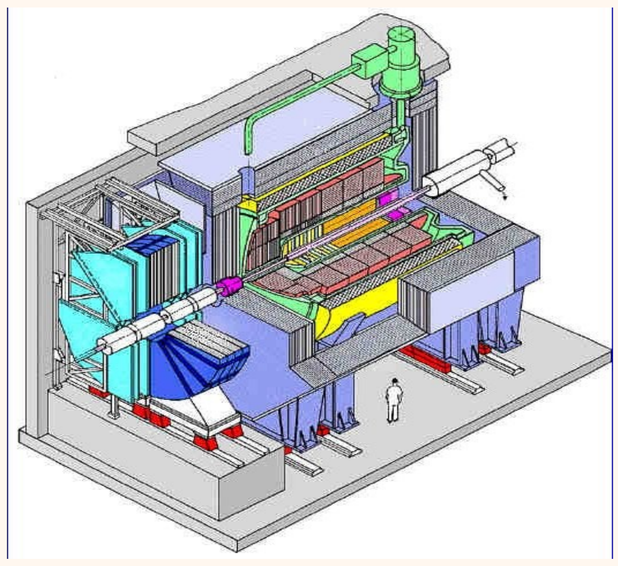
Recent Collaboration meeting: Cracow 2011

Building the H1 Detector, 1986 – 1992

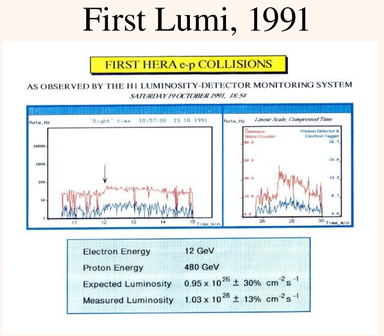




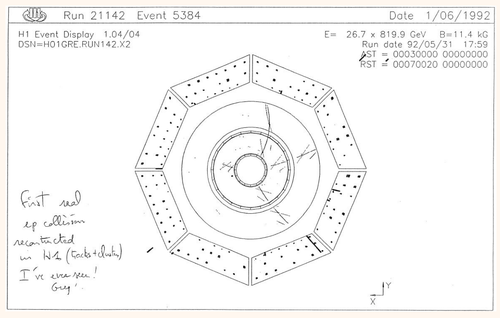
The H1 Detector



First Lumi, 1991

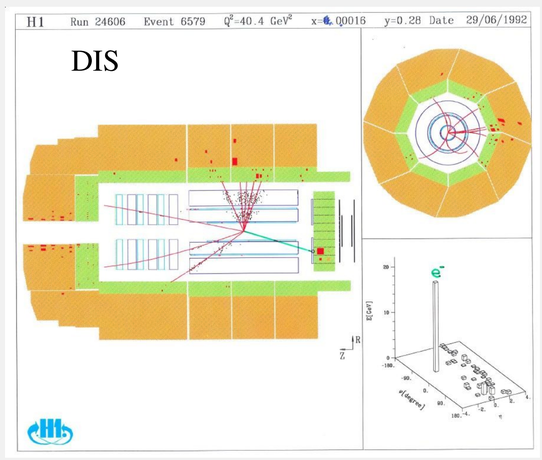


First *ep* Event, 1992

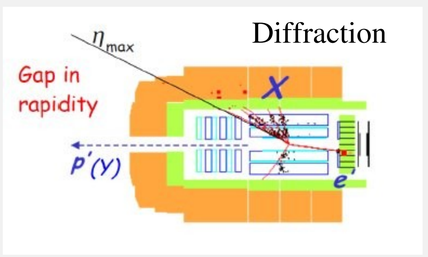


Prominent Events and first Results

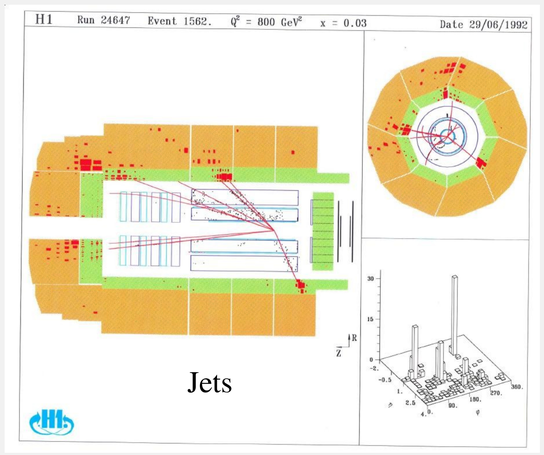
DIS



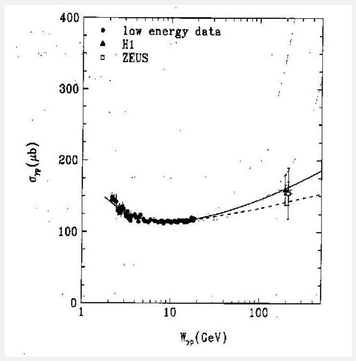
Diffraction



Jets

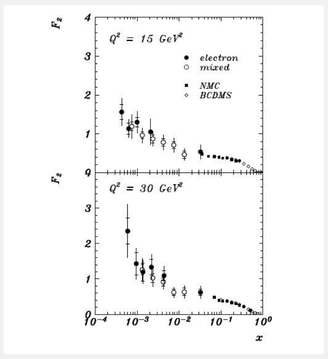


Total Photoproduction Cross Section

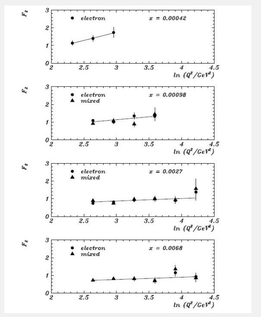


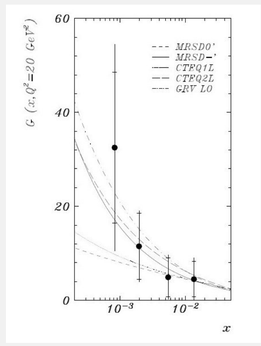
First results on the total photoproduction Cross Section measurement with the H1 detector at HERA. The data were extracted from low Q² collisions of 26,7 GeV electrons with 820 GeV protons.

First F_2

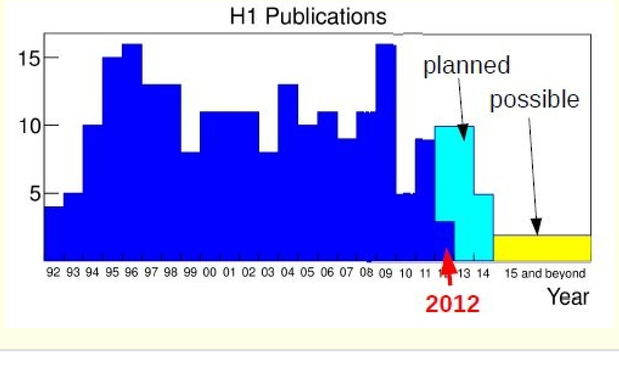


First measurement of F_2 by H1: the Structure Function indeed rises strongly at low x





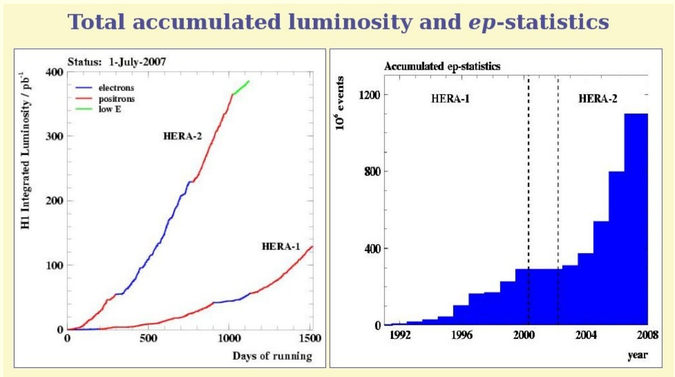
First gluon distribution from scaling violations

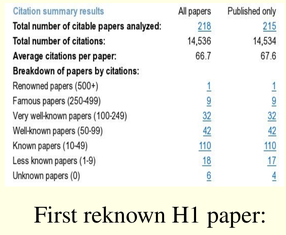


The Achievements of the H1 experiment

The measurements:

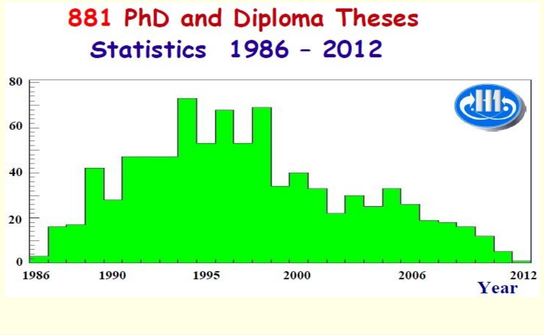
- Have reached a precision beyond all expectations, and are ahead of theory in terms of systematic errors.
- Highlight QCD as the theory of the Strong Interactions, confirm all theory predictions in ever finer detail.
- Explore and map out the structure of the Proton, the Photon and the Pomeron, provide important input to the LHC measurements and future discoveries.





Citation summary results	All papers	Published only
Total number of citable papers analyzed:	218	215
Total number of citations:	14,536	14,534
Average citations per paper:	66.7	67.6
Breakdown of papers by citations:		
Renowned papers (500+)	1	1
Famous papers (250-499)	9	9
Very well-known papers (100-249)	32	32
Well-known papers (50-99)	42	42
Known papers (10-49)	110	110
Less known papers (1-9)	18	17
Unknown papers (0)	6	4

First reknown H1 paper:
"Deep inelastic inclusive *ep* scattering at low x and a determination of α_s"



The data are a rich and unique source of information, and continue to provide new physics results

C. Diaconu, J. Feltesse, N. Gogitidze, S. Levonian, J. Meyer, J. Olsson – on behalf of the H1 Collaboration