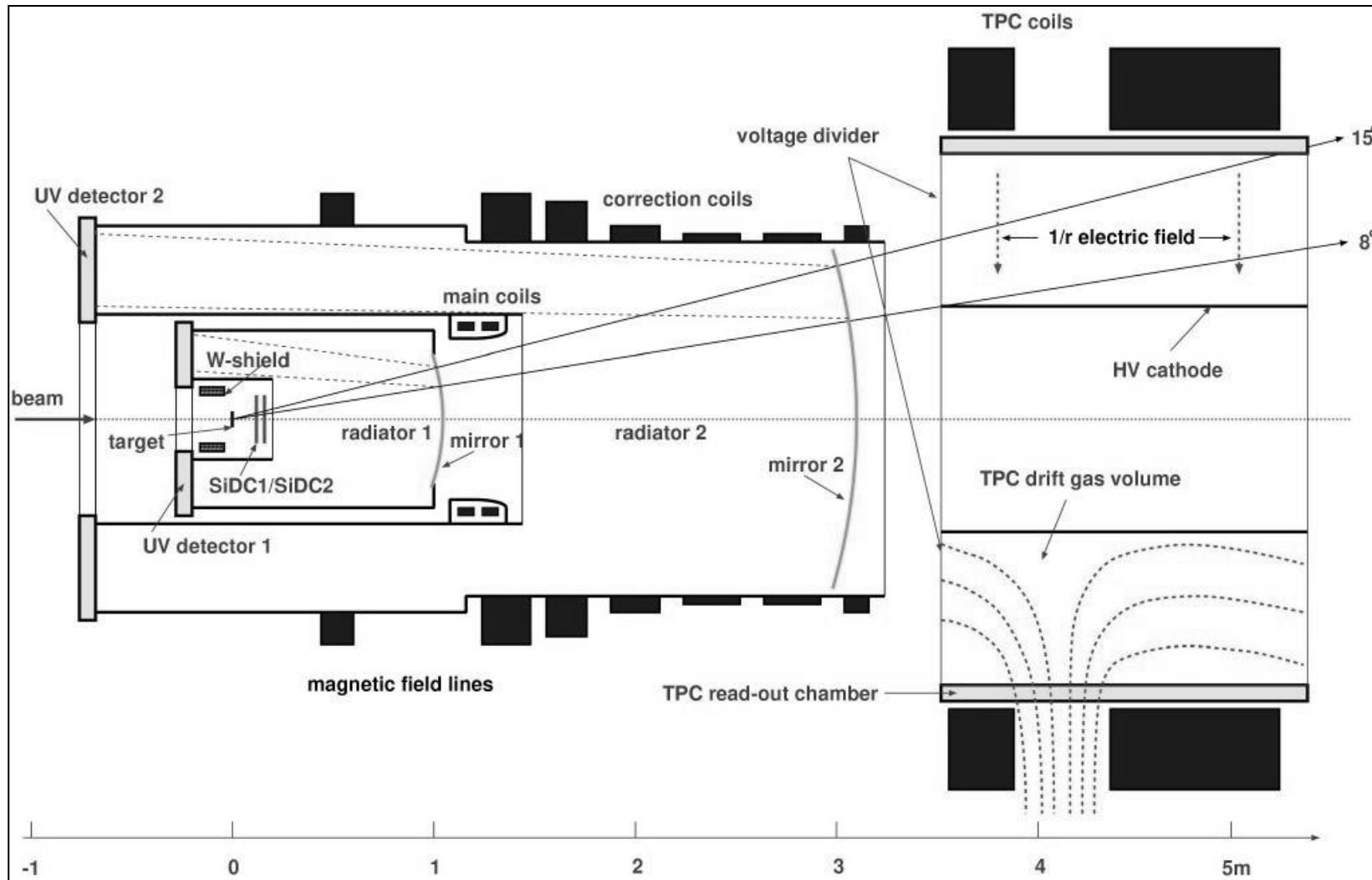


CERES

- dilepton spectrometer at CERN SPS
- dielectron spectrum measured in pA collisions agrees with hadron decay cocktail
- dielectron spectrum measured in AA collisions exceeds hadron decay cocktail
- upgrade by a TPC in 1998 – improved momentum resolution to see the ω -meson, added ability to measure hadrons

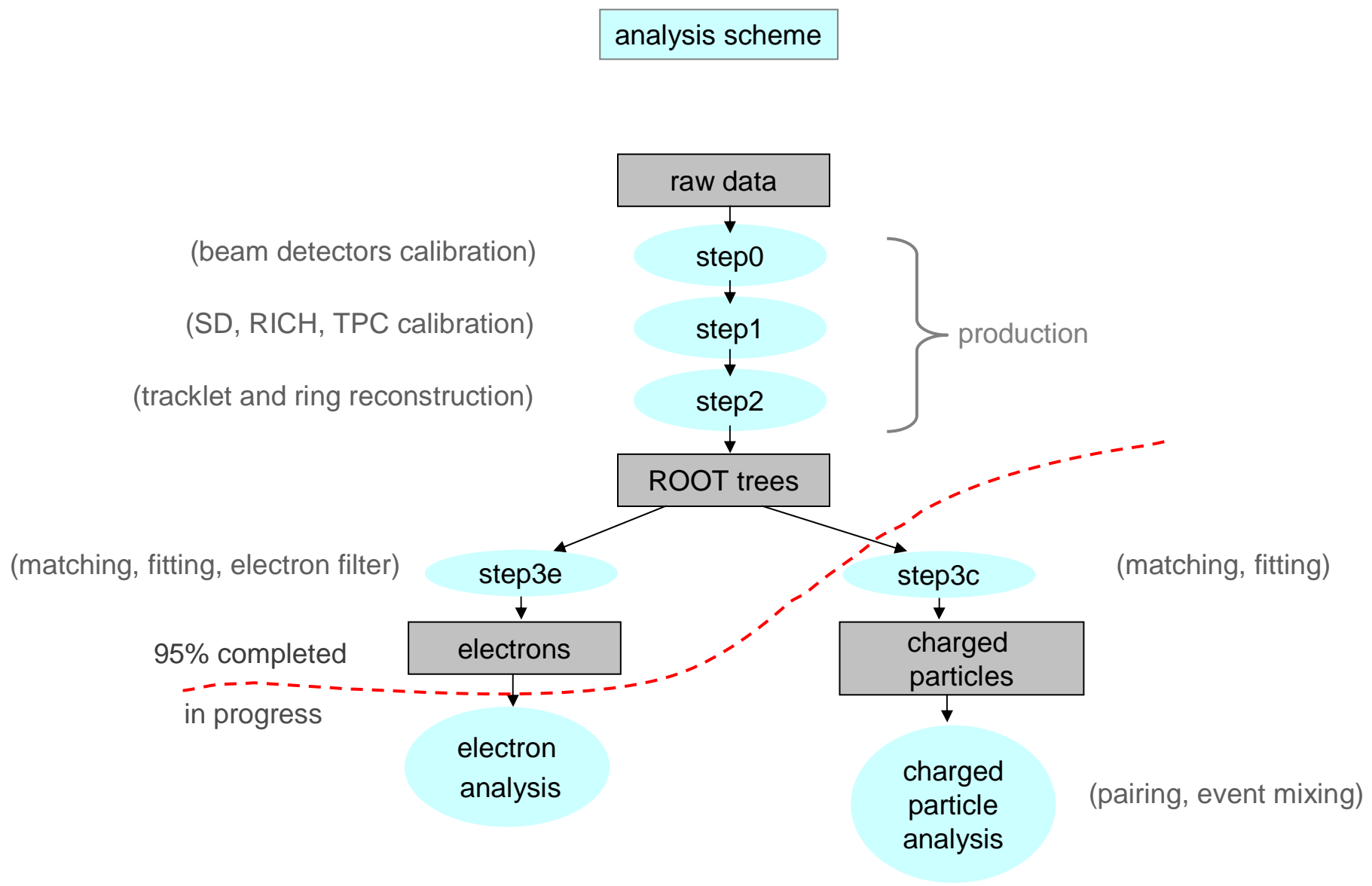
CERES setup 1998-2000



CERES analysis at CERN

status December 2003

- Pb+Au at 40 AGeV from 1999 8.2 TB raw data in CASTOR
- Pb+Au at 158 AGeV from 2000 18.5 TB raw data in CASTOR



AFS, CASTOR, and LSF resources

- AFS experiment space: currently 60 GB
80 GB + 100 GB requested in 2004
- CASTOR pool 2.5 TB
additional temporary analysis pool 2.5 TB
- LSF queues used: 1nh, 8nh, prod200, prod400

software

- main component: CERES Object Oriented Library (COOL)
- management: CVS repository in Darmstadt
mirrors in Heidelberg and at CERN
- raw data in custom format
- processed data in ROOT format

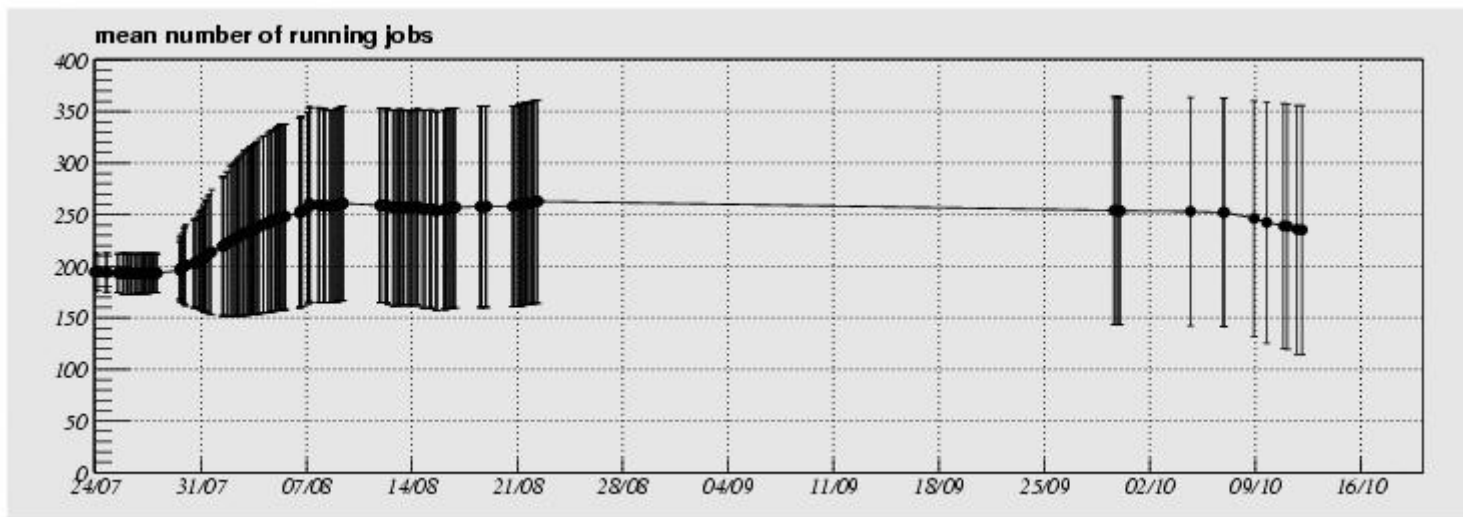
LSF and CASTOR resources usage

step	when	CPU time	result volume	queue	software
step0-2	July-Oct 2003	100 months	15.8 TB	prod400	COOL, Vogle, Roguewave, Gemini, CLHEP, ROOT
step3e	Oct-Nov 2003	30 months	1.2 TB	prod400	COOL, ROOT
step3c	Nov-Dec 2003	40 months	about 1 TB	prod400	COOL, ROOT
electron analysis	2003-2004			1nh, 8nh, ...	ROOT
charged particle analysis	2003-2005			1nh, 8nh, ...	ROOT
reprocessing 1999 data	2004	60 months	9 TB	prod200 or prod400	COOL, Vogle, Roguewave, Gemini, CLHEP, ROOT
Monte Carlo	-2005			1nh, 8nh, ...	Geant3

2000 data set is being meant if not mentioned otherwise

comments on performance

- 3% of data lost during transfer from Redwood Tapes to CASTOR
- CASTOR access: problems when reading files via RFIO: in the middle of a file the error message "no such file or directory"
- CASTOR access: staging faster and more reliable than direct RFIO
- CASTOR access inefficient for small files: solved by bunching bursts in groups of ten
- smooth LSF running last summer, see below; now overcrowded



comments on support

- flexible resource allocation policy gratefully acknowledged
- need for clarification/tutorial on efficient CASTOR access
(contradicting recommendations exist)